

Noorul Islam College of Engineering

SELF ASSESSMENT REPORT(TIER - I) FOR Information Technology

Part A : Institutional Information

1 Name and Address of the Institution

Noorul Islam College of Engineering,
Kumaracoil, Thuckalay

2 Type of the Institution:

☒ Deemed to be University	☐ Autonomous
☐ University	☐ Non-Autonomous (Affiliated)
☐ Institute of National Importance	☐ Any Other(Please Specify)

3 Year of establishment of the Institution:

1989

4 Ownership Status:

☐ Central Government	☒ Any Other(Please Specify)
☐ State Government	
☐ Government Aided	
☐ Self financing	

5 Name and Address of Affiliating University(if any)

6 Other Academic Institutions of the Trust/Society/Company etc., if any

Name of Institutions	Year of Establishment	Programs of Study	Location

.....

7 Details of all the programs being offered by the Institution under consideration:

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
Information Technology	UG	1998	2025	30	Yes	90	Granted accreditation for 3 years for the period (specify period)	2007	2010		4
Sanctioned Intake for Last Five Years for the Information Technology											
Academic Year						Sanctioned Intake					
2025-26						90					
2024-25						60					
2023-24						30					
2022-23						30					
2021-22						30					
2020-21						30					
Cyber Security	PG	2013	2013	12	No	12	Not eligible for accreditation	--	--		2
Computer Science and Engineering	UG	1989	2024	30	Yes	60	Granted accreditation for 3 years for the period (specify period)	2007	2010		4
Computer Science and Engineering	PG	2002	2002	12	No	12	Not eligible for accreditation	--	--		2
Master of Computer Application	PG	1995	1995	20	Yes	60	Granted accreditation for 3 years for the period (specify period)	2007	2010	Yes	2
Master of Business Administration	PG	1994	1994	60	Yes	90	Granted accreditation for 3 years for the period (specify period)	2007	2010	Yes	2
Aeronautical Engineering	UG	2009	2009	60	Yes	30	Not eligible for accreditation	--	--	No	4
Aerospace Engineering	UG	2011	2011	60	Yes	30	Not eligible for accreditation	--	--	0	4
Aircraft Maintenance Engineering	UG	2013	2013	60	No	60	Not eligible for accreditation	--	--	0	4
Artificial Intelligence and Data Science	UG	2020	2020	30	Yes	60	Not eligible for accreditation	--	--	0	4

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
Artificial Intelligence and Machine Learning	UG	2025	2025	60	No	60	Not eligible for accreditation	--	--	0	4
Automobile Engineering	UG	2009	2009	60	Yes	30	Not eligible for accreditation	--	--	0	4
Biomedical Engineering	UG	2009	2009	60	No	60	Not eligible for accreditation	--	--	0	4
Civil Engineering	UG	2007	2007	60	Yes	30	Not eligible for accreditation	--	--	0	4
Computer Science and Engineering (Artificial Intelligence)	UG	2025	2025	60	No	60	Not eligible for accreditation	--	--	0	4
Computer Engineering (Software Engineering)	UG	2025	2025	30	No	30	Not eligible for accreditation	--	--	0	4
Electrical and Electronics Engineering	UG	1993	1993	60	Yes	30	Not eligible for accreditation	--	--	No	4
Electronics and Communication Engineering	UG	1989	1989	30	Yes	30	Not eligible for accreditation	--	--	0	4
Electronics and Instrumentation Engineering	UG	1997	1997	60	Yes	30	Not eligible for accreditation	--	--	0	4
Fire Technology and Safety	UG	2011	2011	60	No	60	Not eligible for accreditation	--	--	0	4
Marine Engineering	UG	2008	2008	60	Yes	30	Not eligible for accreditation	--	--	0	4
Mechanical Engineering	UG	1995	1995	60	Yes	60	Not eligible for accreditation	--	--	0	4
Nano Technology	UG	2009	2009	60	Yes	30	Not eligible for accreditation	--	--	0	4
Aeronautical Engineering	PG	2011	2011	18	Yes	9	Not eligible for accreditation	--	--	0	2
Applied Electronics	PG	2007	2007	18	Yes	9	Not eligible for accreditation	--	--	0	2
Automobile Engineering	PG	2014	2014	18	Yes	12	Not eligible for accreditation	--	--	0	2
Communication Systems	PG	2007	2007	25	Yes	12	Not eligible for accreditation	--	--	0	2

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
Control and Instrumentation	PG	2007	2007	18	Yes	12	Not eligible for accreditation	--	--	0	2
Nano Technology	PG	2009	2009	18	Yes	9	Not eligible for accreditation	--	--	0	2
Computer Integrated Manufacturing	PG	2007	2007	18	Yes	9	Not eligible for accreditation	--	--	No	2
Thermal Engineering	PG	2007	2007	18	Yes	9	Not eligible for accreditation	--	--	0	2
Structural Engineering	PG	2013	2013	18	Yes	12	Not eligible for accreditation	--	--	0	2
MBA – Logistics and Supply Chain Management	PG	2024	2024	30	No	30	Not eligible for accreditation	--	--	0	2
MBA – Aviation and Airport Management	PG	2024	2024	12	Yes	30	Not eligible for accreditation	--	--	0	2

8 Programs to be considered for Accreditation vide this application:

S No	Level	Discipline	Program
1	Post Graduate	Computer Application	Master of Computer Application
2	Post Graduate	Management	Master of Business Administration
3	Under Graduate	Engineering & Technology	Computer Science and Engineering
4	Under Graduate	Engineering & Technology	Information Technology

Table No. A8.2

S No	Name of the Department	Name of the Program	Name of Allied Departments/Cluster	Name of Allied Program
No record exist(s)				

9 Total Number of Faculty Members in Various Departments:

ID	Department Name	Number of faculty members in the Department (UG and PG)											
		2025-26 (CAY)				2024-25 (CAYm1)				2023-24 (CAYm2)			
		No. of Professors	No. of Associate Professors	No. of Assistant Professors	Total faculty members	No. of Professors	No. of Associate Professors	No. of Assistant Professors	Total faculty members	No. of Professors	No. of Associate Professors	No. of Assistant Professors	Total faculty members
1	Aeronautical Engineering	1	2	5	8	1	2	5	8	1	2	5	8
2	Aerospace Engineering	0	1	5	6	0	1	5	6	0	1	5	6
3	Aircraft Maintenance Engineering	0	2	10	12	0	2	10	12	0	2	10	12
4	Automobile Engineering	0	4	4	8	0	4	4	8	1	4	3	8
5	Biomedical Engineering	1	2	9	12	1	2	9	12	1	2	9	12
6	Civil Engineering	1	0	8	9	0	1	9	10	0	1	7	8
7	Nano Technology	2	2	4	8	2	2	4	8	2	1	4	7
8	Electrical and Electronics Engineering	1	4	3	8	1	4	3	8	1	4	3	8
9	Electronics and Communication Engineering	1	4	3	8	1	4	3	8	1	4	2	7
10	Electronics and Instrumentation Engineering	0	5	3	8	0	5	3	8	0	5	2	7
11	Fire Technology and Safety Engineering	0	2	10	12	0	2	10	12	0	2	7	9
12	Marine Engineering	0	2	10	12	0	2	10	12	1	1	10	12

13	Mechanical Engineering	4	3	6	13	2	2	9	13	2	2	9	13
14	Artificial Intelligence	0	2	6	8	0	1	4	5	0	1	4	5

10 Total Number of Engineering Students in Various Departments:

ID	Department Name	Number of students in the Department (UG and PG)		
		2025-26 (CAY)	2024-25 (CAYm1)	2023-24 (CAYm2)
1	Aeronautical Engineering	20	19	14
2	Aerospace Engineering	16	7	8
3	Aircraft Maintenance Engineering	31	17	11
4	Automobile Engineering	3	6	4
5	Biomedical Engineering	36	30	20
6	Civil Engineering	9	18	11
7	Nano Technology	3	2	1
8	Electrical and Electronics Engineering	13	7	6
9	Electronics and Communication Engineering	8	21	6
10	Electronics and Instrumentation Engineering	2	7	3
11	Fire Technology and Safety Engineering	9	9	12
12	Marine Engineering	16	2	1
13	Mechanical Engineering	26	27	20
14	Artificial Intelligence	60	35	32

11 Vision of the Institution:

To be a globally recognized institution of excellence in higher education and research, dedicated to fostering innovation and to equip students with the skills, expertise and global competence necessary to thrive in an ever-evolving technological landscape, contributing to the nations progress.

12 Mission of the Institution:

To impart holistic development of our students with high standards of discipline, ethics and integrity and nurture enlightened individuals dedicated to serve humanity with focused research in cutting-edge areas of science and technology, thereby contributing meaningfully to societal progress.

13 Contact Information of the Head of the Institution and NBA coordinator, if designated:

Head of the Institution	
Name	Dr. Tessy Thomas
Designation	Vice-Chancellor
Mobile No.	9363797458
Email ID	vc@niuniv.com

☒ **NBA Coordinator, If Designated**

Name	Dr. A. Shajin Nargunam
Designation	Pro Vice-Chancellor (Academic
Mobile No.	9486856113
Email ID	shajin@niuniv.com

PART B: Criteria Summary

Criteria No.	Criteria	Total Marks	Institute Marks
1	OUTCOME-BASED CURRICULUM	120	120.00
2	OUTCOME-BASED TEACHING LEARNING	120	120.00
3	OUTCOME-BASED ASSESSMENT	120	110.00
4	STUDENTS' PERFORMANCE	120	59.41
5	FACULTY INFORMATION	100	94.00
6	FACULTY CONTRIBUTIONS	120	65.67
7	FACILITIES AND TECHNICAL SUPPORT	100	90.00
8	CONTINUOUS IMPROVEMENT	80	80.00
9	STUDENT SUPPORT AND GOVERNANCE	120	115.00
	Total	1000	854

Part B : Criteria Summary

1 OUTCOME-BASED CURRICULUM (120)

Total Marks 120.00

1.1 Vision, Mission and Program Educational Objectives (PEOs) (35)

Total Marks 35.00

1.1.1 State the Vision and Mission of the Institute and the Department (5)

Institute Marks : 5.00

Vision of the institute	To be a globally recognized institution of excellence in higher education and research, dedicated to fostering innovation and to equip students with the skills, expertise and global competence necessary to thrive in an ever-evolving technological landscape, contributing to the nation's progress.											
Mission of the institute	To impart holistic development of our students with high standards of discipline, ethics and integrity and nurture enlightened individuals dedicated to serve humanity with focused research in cutting- edge areas of science and technology, thereby contributing meaningfully to societal progress.											
Vision of the Department	The Department envisions to become a centre for academic excellence with young efficient Graduates, Researchers, Innovators, and Entrepreneurs and to inculcate values to make them Professionals to take up any kind of challenges in the field of IT and also socially oriented human beings with ethical values.											
Mission of the Department	<table><tr><th>Mission No.</th><th>Mission Statements</th></tr><tr><td>M1</td><td>To offer high-quality education to prepare our graduates to become successful Professionals in IT Industry, Government, Research, Entrepreneurial pursuit and consulting firms.</td></tr><tr><td>M2</td><td>To enhance student's knowledge to the latest advancements in IT by organizing and participating in technical programs.</td></tr><tr><td>M3</td><td>To inculcate innovative thinking among students by encouraging them to pursue research and higher studies for better adaptability towards meeting global needs.</td></tr><tr><td>M4</td><td>To empower our students to unleash their abilities for the substantial development of the society.</td></tr></table>		Mission No.	Mission Statements	M1	To offer high-quality education to prepare our graduates to become successful Professionals in IT Industry, Government, Research, Entrepreneurial pursuit and consulting firms.	M2	To enhance student's knowledge to the latest advancements in IT by organizing and participating in technical programs.	M3	To inculcate innovative thinking among students by encouraging them to pursue research and higher studies for better adaptability towards meeting global needs.	M4	To empower our students to unleash their abilities for the substantial development of the society.
Mission No.	Mission Statements											
M1	To offer high-quality education to prepare our graduates to become successful Professionals in IT Industry, Government, Research, Entrepreneurial pursuit and consulting firms.											
M2	To enhance student's knowledge to the latest advancements in IT by organizing and participating in technical programs.											
M3	To inculcate innovative thinking among students by encouraging them to pursue research and higher studies for better adaptability towards meeting global needs.											
M4	To empower our students to unleash their abilities for the substantial development of the society.											

1.1.2 State PEOs of the Program (5)

Institute Marks : 5.00

PEO No.	Program Educational Objectives Statements
PEO1	To graduate students to attain solid foundation in the fundamentals of IT with an aim to pursue continuing education.
PEO2	To educate students to excel as multi-skilled IT Professionals capable of developing technical solutions for real world problems and carry out research or advance study leading to novel innovations in the field of IT and interrelated disciplines.
PEO3	To enable graduates to cope with the advancements in technologies and concepts and to contribute significantly to the needs of the society.
PEO4	To mould graduates to acquire and exercise efficient communication skills, eminent leadership qualities and team work to challenge the contemporary issues to broader social context.
PEO5	To prepare graduates recognize the importance of life-long learning with an ethical attitude to fulfill their personal and organizational goals.

1.1.3 Process of Defining Vision, Mission and PEOs (10)

Institute Marks : 10.00

The Vision, Mission and Programme Educational Objectives (PEOs) of the B.Tech. Information Technology programme are effectively published and disseminated to all stakeholders to ensure awareness, transparency and alignment with programme goals. The dissemination is carried out through the following means:

- Institute website: www.niuniv.com
- HOD Room
- Departmental Corridors
- Laboratories
- Prominent locations in the institution
- Curriculum / Syllabus books
- Record of Academic Work
- Lab Manuals
- e Mail Correspondence by faculty
- Board of Studies meeting

Process of Dissemination among the Stakeholders:

The Stake holders are Students, Alumni, Employers, Academicians and Industry Experts. The Dissemination and Awareness is given to them in the following ways.

For Students:

The Vision, Mission and Programme Educational Objectives (PEOs) of the B.Tech. Information Technology programme is communicated to students through multiple formal and informal mechanisms to ensure clarity and awareness:

- Explained during the Induction Programme for first-year students
- Displayed on prominent locations of the Department
- Included in the Student Handbook, Curriculum and Syllabus Books
- Discussed by Class Advisors and Course Instructors at the beginning of each semester
- Incorporated in Record of Academic work and Laboratory Manuals
- Reinforced during departmental meetings, seminars, workshops and technical events
- Shared through the Institute Website, Learning Management Systems (LMS) and email Correspondence

These practices ensure that students understand the programme objectives, align their learning with expected outcomes, and actively participate in achieving the programme goals.

For Parents:

The Vision, Mission and Programme Educational Objectives (PEOs) of the B.Tech. Information Technology programme are communicated to parents through the following mechanisms:

- Explained during Parent-Teacher Meetings
- Included in the Student Handbook, Prospectus and Curriculum/Syllabus Book provided to parents
- Displayed on the Institutional Websites and e-mail correspondence, accessible to parents at any time
- Discussed by Class Advisors and Faculty Mentors during academic progress reviews

These measures ensure that parents are well informed about the programme objectives, expected graduate attributes and the academic direction of the department.

Parent Teacher Association Meeting Brochure



For Alumni:

The Vision, Mission and Programme Educational Objectives (PEOs) of the B.Tech. Information Technology programme are communicated to alumni through the following means:

- Shared and discussed during Alumni Meets and Department–Alumni Interaction Programmes
- Communicated through the Institutional Websites and email Correspondence.
- Included in alumni newsletters, emails and official departmental communications
- Discussed during Department Advisory Board meetings where alumni act as members
- Reinforced through industry interaction programmes, guest lectures and mentoring activities conducted by alumni

These channels ensure that alumni remain aware of the programme objectives, contribute feedback, and actively support the continuous improvement of the programme.

Alumni Interaction Programme Brochure



For Employer:

Dissemination is carried out through employer feedback forms, Board of Studies (BOS) meetings, Department Advisory Board (DAB) meetings, the college website, and official email correspondence.

Through these multiple channels, the department ensures that the Vision, Mission and PEOs are clearly communicated, well understood and periodically reinforced among all stakeholders, thereby supporting continuous improvement and outcome-based education.



Fig.1.1.3.1 Dissemination in Department corridor

1/24/26, 1:55 PM

Noorul Islam Centre for Higher Education Mail - Requesting to send the details of Final students



Jeyasheela Y <jeyasheela@niuniv.com>

Requesting to send the details of Final students

Jeyasheela Y <jeyasheela@niuniv.com>
To: Brindha Thomas <brindhalizzy@gmail.com>

Sat, Jan 24, 2026 at 1:54 PM

Mam,
Kindly send the Internship details of Final students.
Thank you

Dr.Y.Jeyasheela,
Associate Professor,
Department of Information Technology.

Vision and Mission of Department of Information Technology: **Vision:**

The Department envisions to become a centre for academic excellence with young efficient Graduates, Researchers, Innovators, and Entrepreneurs and to inculcate values to make them Professionals to take up any kind of challenges in the field of IT and also socially oriented human beings with ethical values.

Mission:

- To offer high-quality education to prepare our graduates to become successful Professionals in IT Industry, Government, Research, Entrepreneurial pursuit and consulting firms.
- To enhance student's knowledge to the latest advancements in IT by organizing and participating in Technical programs.
- To inculcate innovative thinking among students by encouraging them to pursue research and higher studies for better adaptability towards meeting global needs.
- To empower our students to unleash their abilities for the substantial development of the society.

<https://mail.google.com/mail/u/1/?ik=88ecd94977&view=pt&search=all&permmsgid=msg-a:r-973385717529149241&simpl=msg-a:r-973385717529149241>

1/1

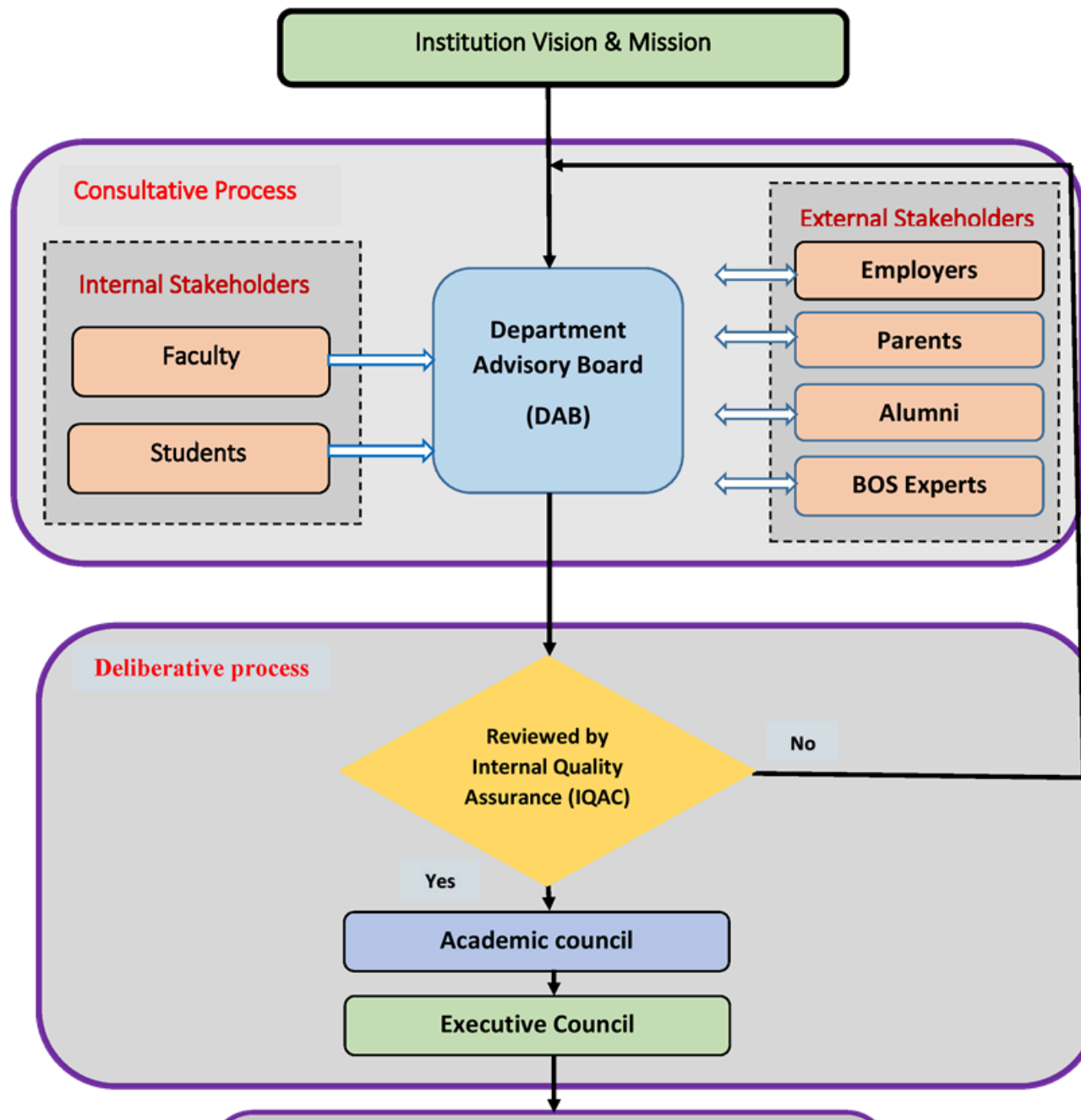
Fig.1.1.3.2 Dissemination through E-mail Correspondence by Faculty

1.1.4 Dissemination of Vision, Mission and PEOs (5)

Institute Marks : 5.00

Process for defining Vision & Mission of the Department

The Department Advisory Board (DAB) prepares the Vision and Mission of the department in accordance with Institution Vision and Mission through the following steps:



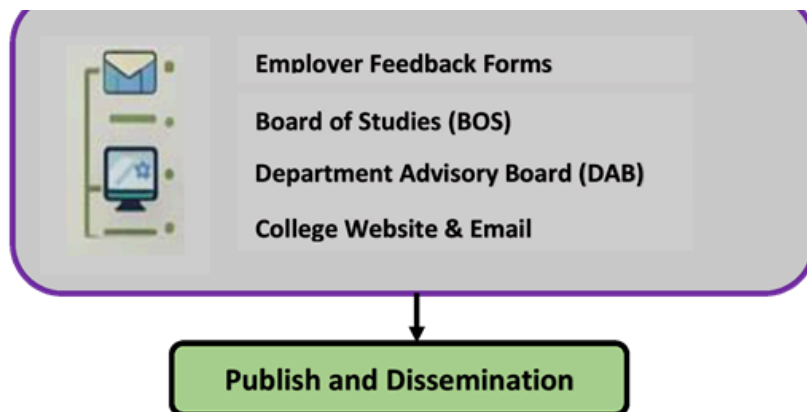


Fig.1.1.4.1 Process for defining Vision & Mission of the Department

Steps for defining Vision & Mission of the Department:

Step 1: Institution Vision and Mission

The process begins with the Institution's Vision and Mission, which serve as the guiding framework for all departmental planning and decision-making.

Step 2: Consultative Process

Inputs are gathered through a consultative mechanism involving key stakeholders.

Internal Stakeholders:

- Faculty
- Students

External Stakeholders:

- Employers
- Parents
- Alumni
- Board of Studies (BOS) Experts

All stakeholder inputs are channeled through the Department Advisory Board (DAB), which consolidates feedback, expectations, and recommendations.

Step 3: Department Advisory Board (DAB)

The Department Advisory Board (DAB) comprises the following members:

- Head of the Department (HoD) – Chairperson
- Senior Faculty Members of the Department (2–4)
- Industry Experts from relevant industries or R&D organizations
- External Expert(s) from the Board of Studies (BoS) (where applicable or in a combined role)
- Alumni Representative(s) with proven professional experience in industry, academia, or entrepreneurship
- Student Representative(s) (optional, usually from the final year)
- IQAC Nominee to ensure alignment with quality assurance mechanisms

- Special Invitees, such as subject experts or representatives from regulatory bodies, as required

Role of the Department Advisory Board (DAB):

The Department Advisory Board (DAB):

- Analyses inputs received from various stakeholders
 - Aligns these inputs with the institutional vision and mission
 - Frames recommendations and proposals for continuous improvement of curriculum, teaching–learning processes, and departmental activities
- These recommendations are forwarded for formal review

Step 4: Review by IQAC

The Internal Quality Assurance Cell (IQAC):

- Reviews the proposals for quality, relevance, and compliance with NBA/NAAC standards
- Ensures continuous improvement and outcome-based education practices
- Suggests revisions if required

Only quality-approved proposals move to the next stage.

Step 5: Academic Council

Once approved by IQAC, the proposal is placed before the Academic Council.

- The Academic Council evaluates academic relevance, curriculum alignment, learning outcomes, and regulatory compliance.
- Suggestions, if any, are incorporated before proceeding further.

Step 6: Board of Management

- After Academic Council approval, the proposal is submitted to the Board of Management.
- The Board of Management provides final approval, focusing on policy, strategic direction, and resource feasibility.

Step 7: Publish and Dissemination

After final approval, the outcomes are formally published and disseminated through:

- Employer feedback forms
- Board of Studies (BOS)
- Department Advisory Board (DAB)
- College website
- Official email communication

Step 8: Continuous Improvement

Feedback from dissemination channels is periodically collected and fed back into the consultative process, ensuring continuous quality improvement.



Kumarakudi, Thuckalay, Kanyakumari District, Tamil Nadu - 626 166 | info@niuniv.com | +91 9486856101, 04661 250666

www.niuniv.com 8888/nicheuni

**NOORUL ISLAM CENTRE
FOR HIGHER EDUCATION**

Accredited by NAAC (Cycle - II)

DEPARTMENT OF INFORMATION TECHNOLOGY

DEPARTMENT ADVISORY BOARD MEMBERS

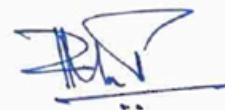
INTERNAL EXPERTS

1. Dr. R. Mathusoothana S. Kumar
Chairman (BOS) / IT Department / NICHE, rmssk@niuniv.com, 9486856119
2. Dr. A. Shajin Nargunam
Prove (Academic) and Dean, Faculty of Information & Computer Engineering, NICHE
shajin@niuniv.com, 9486856113
3. Prof. A. R. Subramoniya Iyer
Professor/ Cyber security/ NICHE, arsiyer1951@gmail.com, 9447575576
4. Dr. S. Maria Celestin Vigila
Associate Professor/ IT/ NICHE, celesleon@yahoo.com, 9442150033
5. Dr. V. Mary Amala Bai
Assoc. Prof. / IT/NICHE, maalas@gmail.com, 7502869501
6. Dr. T.Brindha
Assoc. Prof. / IT/NICHE, brindhazizy@gmail.com, 8610448728
7. Dr.Y.Jeyasheela
Assoc. Prof. / IT/NICHE, niceminimelest@gmail.com, 9566424865
8. Dr. M.B.Jayalekshmi
Asst. Prof., Dept. of IT, NICHE, mbjaya2k5@gmail.com, 9486795892
9. Dr.T.V.Sindia
Asst. Prof., Dept. of IT, NICHE, sindiatv@gmail.com, 9486737823
10. Ms. Leena S. Watson
Asst. Prof., Dept. of IT, NICHE, watsonleena@gmail.com, 9048964863

EXTERNAL EXPERTS

1. Dr. P. Yogesh
Professor, Dept., of Information Science & Technology,
Anna University, Chennai 25
Mail-id: yogesh@auist.net, yogesh@annauniv.edu, Mob.no: 9444366580
2. Mr. C. Balan
Sr. Director, Centre for Development of Advanced Computing (C-DAC)
Vellayambalam, Thiruvananthapuram, Kerala State, India-695 033
Mail-id: csbalan@yahoo.com, Mob.no: 9446380523

3. **Mr.G. Sujin (Alumni)**
Sr. Salesforce Consultant, Finesse IT Labs Pvt Ltd
Bangalore, Karnataka.
Mail-id: sujin@finessedirect.com, Mob.no: 8754253487



Dr. R. Mathu Soothana S. Kumar,
Head Dept. of Information Technology,
Noorul Islam Centre for Higher Education,
Kumaracoll, Thuckalay - 629 180.

Fig.1.1.4.2 Department Advisory Board Members (DAB)

Process for defining the PEO of the Department

After getting suggestions from the stakeholders, the Department Advisory Board (DAB) develops the PEOs by considering the vision and mission of the department as reference.

Step 1:

Feedback on Programme Educational Objectives (PEOs) is collected from all stakeholders, including faculty, alumni, parents, employers, BOS experts, and industry experts. The Department Advisory Board (DAB) analyzes these inputs and aligns them with the Department Vision and Mission to frame or revise the PEOs.

Step 2:

The framed/revised PEOs are submitted to the Internal Quality Assurance Cell (IQAC) for review to ensure quality compliance and consistency with institutional policies.

Step 3:

The IQAC reviews and validates the PEOs and forwards the recommendations to the Academic Council (AC) for academic approval.

Step 4:

The approved PEOs are placed before the Board of Management (BoM) for final ratification.

Step 5:

After ratification by the Board of Management, the finalized PEOs are published and disseminated to all stakeholders through the institute website, handbooks, and other official channels.

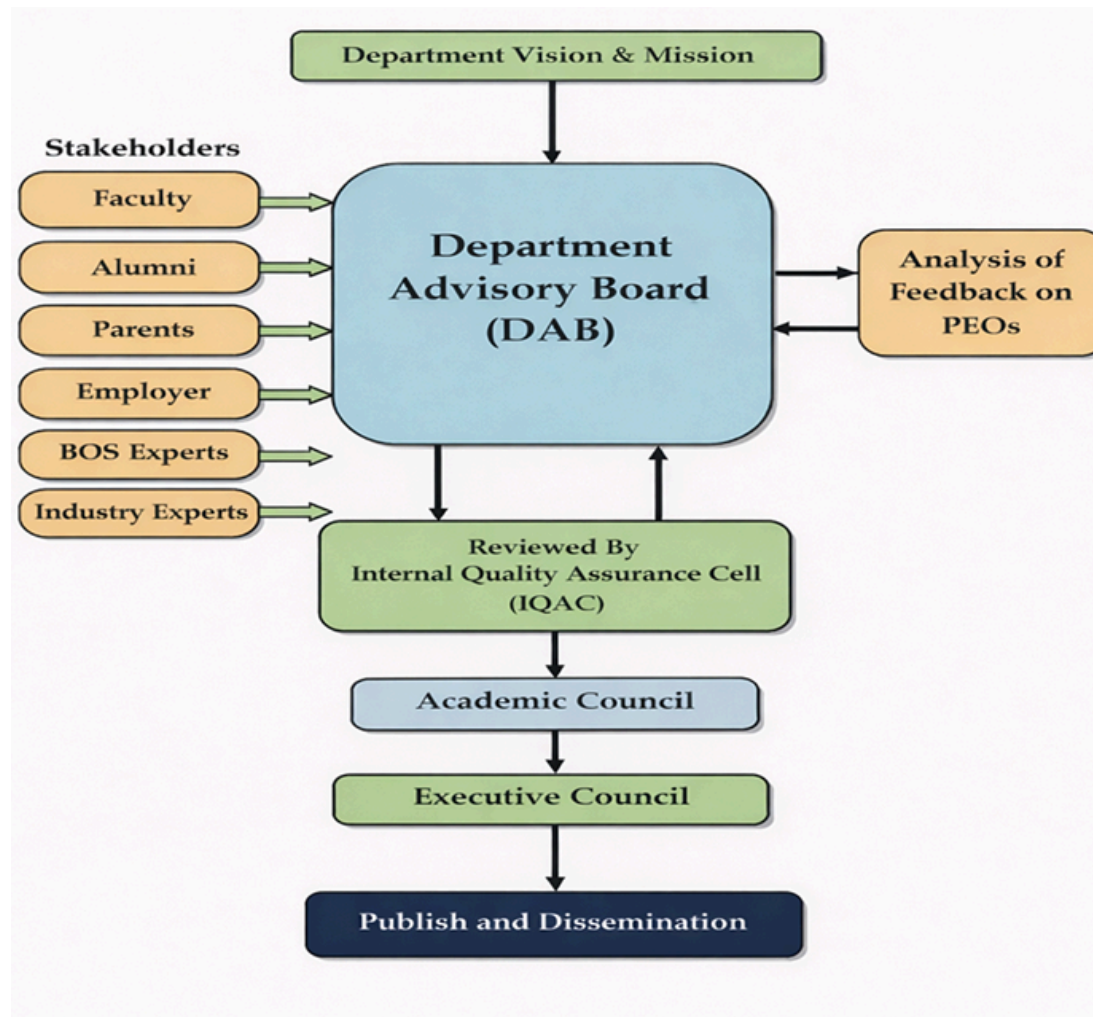


Fig. 1.1.4.3 Process for defining the PEO of the Department

1.1.5 Mapping of PEOs with Mission (10)

Institute Marks : 10.00

PEO Statements	M1	M2	M3	M4
To graduate students to attain solid foundation in the fundamentals of IT with an aim to pursue continuing education.	3 ▼	2 ▼	3 ▼	2 ▼
To educate students to excel as multi-skilled IT Professionals capable of developing technical solutions for real world problems and carry out research or advance study leading to novel innovations in the field of IT and interrelated disciplines.	3 ▼	3 ▼	3 ▼	2 ▼

To enable graduates to cope with the advancements in technologies and concepts and to contribute significantly to the needs of the society.	2 ▼	3 ▼	2 ▼	3 ▼
To mould graduates to acquire and exercise efficient communication skills, eminent leadership qualities and team work to challenge the contemporary issues to broader social context.	2 ▼	2 ▼	1 ▼	3 ▼
To prepare graduates recognize the importance of life-long learning with an ethical attitude to fulfill their personal and organizational goals.	2 ▼	2 ▼	3 ▼	2 ▼

Table 1.1.5.1 Justification of Mapping

PEO	Mission Statements Mapped	Level of Mapping	Justification
PEO 1	M1, M3	Strong (3)	Missions M1 and M3 strongly support PEO1 by providing high-quality education and encouraging research and higher studies, thereby building a strong foundation in IT fundamentals and promoting continuing education.
	M2, M4	Medium (2)	Missions M2 and M4 moderately contribute by exposing students to emerging technologies and societal needs, which reinforce learning and professional growth.
PEO 2	M1, M2,M3	Strong (3)	Strong alignment with M1, M2, and M3 enables graduates to become multi-skilled IT professionals through quality education, exposure to latest technologies, and research orientation, fostering innovation and real-world problem solving.
	M4	Medium (2)	Mission M4 moderately supports PEO2 by encouraging application of technical solutions to address societal and professional challenges.
PEO 3	M2, M4	Strong (3)	Missions M2 and M4 strongly contribute by equipping graduates with up-to-date technological knowledge and enabling them to apply IT solutions for societal development
	M1, M3	Medium (2)	Missions M1 and M3 moderately support PEO3 by strengthening foundational knowledge and innovative thinking necessary to adapt to technological advancements.
PEO 4	M4	Strong (3)	Mission M4 strongly supports the development of communication skills, leadership qualities, teamwork, and social responsibility required to address contemporary issues in a broader social context.
	M1, M2	Medium (2)	Missions M1 and M2 moderately contribute by enhancing professional competence, collaborative learning, and exposure to technical environments.
	M3	Low (1)	Mission M3 has limited direct influence on communication and leadership development, as it primarily emphasizes research and higher studies.
PEO 5	M3	Strong (3)	Strong alignment with M3 promotes lifelong learning and ethical attitude by encouraging research, innovation, and higher studies for personal and professional growth.
	M1, M2,M4	Medium (2)	Missions M1, M2, and M4 moderately support lifelong learning and ethical responsibility through strong fundamentals, technological exposure, and societal engagement.

1.2 Curriculum Structure and Features (30)

Total Marks 30.00

1.2.1 State the Process for Developing/Revising the Program Curriculum (10)

Institute Marks : 10.00

The Department of Information Technology designs the curriculum to meet the requirements of the IT industry, societal needs, and lifelong learning. Continuous transformation and recent developments in emerging technologies are systematically incorporated into the curriculum. The curriculum design and development process is carried out to fulfill the following:

- Vision and Mission of the Department
- Programme Educational Objectives (PEOs)
- Programme Outcomes (POs) as defined by NBA
- Programme Specific Outcomes (PSOs)

The various curriculum components such as Basic Sciences, Engineering Sciences, Humanities and Social Sciences, Programme Core Courses, Programme Electives, Open Electives, Internships, and Project(s) are identified and structured to ensure balanced attainment of knowledge, skills, and professional attitudes.

The Course Outcomes (COs) for all courses are formulated by the respective course coordinators in consultation with the Board of Studies (BoS) Chairman and other stakeholders. The correlation of COs with POs and PSOs is established for every course to ensure compliance with NBA requirements and Washington Accord Graduate Attributes. The designed curriculum is circulated to academic experts and industry professionals for review. The valuable suggestions and feedback received are carefully analysed and incorporated to revise the curriculum in line with industrial expectations and academic standards.

The PO and PSO attainments are computed for every academic year using direct and indirect assessment tools. The attainment results are analysed by the Department Advisory Board (DAB) as part of the Continuous Quality Improvement (CQI) process.

The process flow for designing and revising the program curriculum is illustrated in the flow diagram. Based on the Department Vision and Mission, PEOs, POs, and PSOs, the required changes in the program curriculum are proposed. Inputs and recommendations from IQAC and AICTE / UGC guidelines are also considered while revising the curriculum.

The Department Advisory Board (DAB) is headed by the Head of the Department and includes both internal and external stakeholders.

- The internal stakeholders include faculty members and students. At the end of every semester, feedback on the curriculum is collected from students and faculty, and the observations are discussed during DAB meetings.
- The external stakeholders include employers, alumni, industry experts, and academic professionals. Feedback regarding students' performance in industry is obtained from employers. Alumni feedback is collected to identify curriculum gaps and employability challenges. Industry experts provide inputs on current industry practices, tools, technologies, and market trends, which are used to recommend necessary curriculum modifications.

The DAB meeting is conducted once every year to review the effectiveness of the curriculum. After incorporating the necessary changes, the revised course structure is verified and forwarded to the Board of Studies (BoS) for approval. The approved curriculum is then submitted to the Academic Council, and finally to the Board of Management (BoM) for approval and implementation.

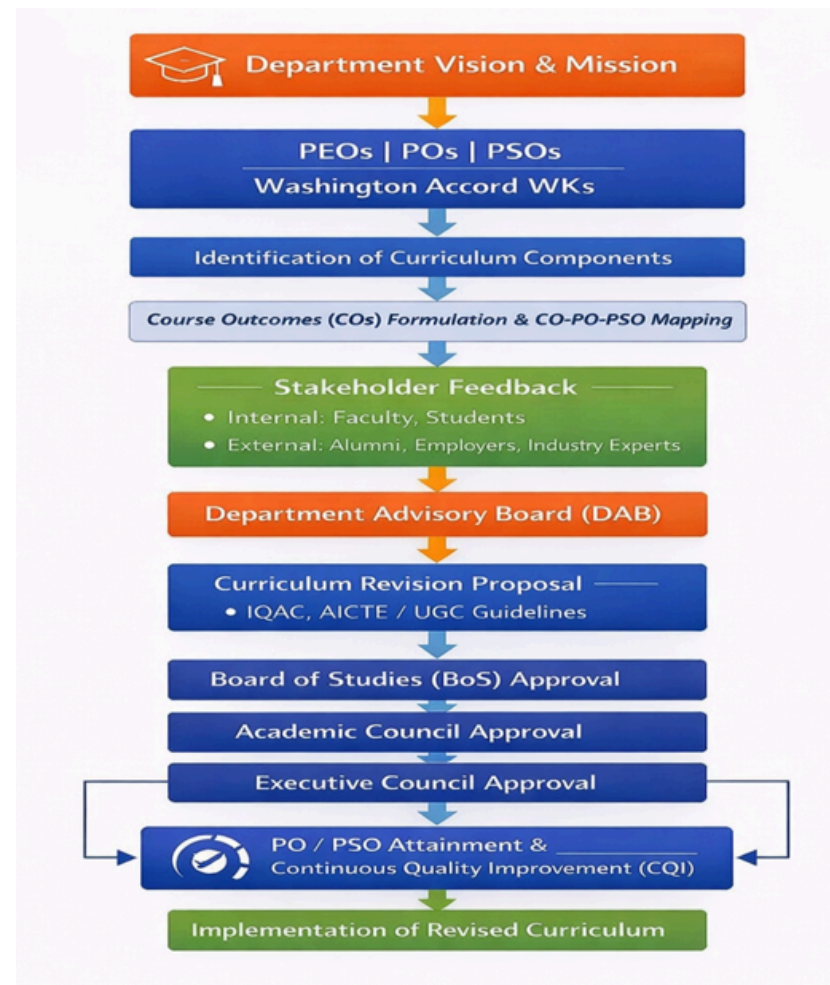


Fig. 1.2.1.1 Process for designing/revising the program curriculum

Feedback from stakeholders and ATR

**NOORUL ISLAM CENTRE FOR HIGHER EDUCATION**

Kumaracoil - 629 180, Kanyakumari District, Tamil Nadu, India
www.niuniv.com info@niuniv.com
+91-9486856101, 04651-250566

DEPARTMENT OF INFORMATION TECHNOLOGY**ACADEMIC YEAR: 2024-25****ACTION TAKEN REPORT ON CURRICULUM FEEDBACK ANALYSIS**

Feedback analysis is an essential component of academic quality assurance and curriculum development. It provides a systematic mechanism to evaluate the effectiveness, relevance, and outcomes of the curriculum by incorporating inputs from key stakeholders such as students, faculty members, alumni, employers, and industry experts. Based on this, the department has implemented several targeted actions to enhance the curriculum, infrastructure, and alignment with industry needs, ultimately aiming to deliver an education that prepares our graduates for both immediate employment and long-term career success.

Student feedback based on curriculum:

- Based on student feedback, the curriculum has been revised to include theory cum practical courses to strengthen conceptual understanding through hands-on learning.
- Industry-based problem-solving projects, including hackathons, have been introduced to enhance practical exposure and employability skills.
- Additionally, more case studies are incorporated into course delivery to bridge the gap between theory and real-world applications.

Teachers feedback based on curriculum:

- In response to teacher feedback, the curriculum now emphasizes multidisciplinary courses to encourage holistic learning.
- Domain-specific verticals have been introduced to provide students with knowledge across multiple disciplines.
- Further, students are encouraged and guided toward research publications through project work and seminars.

Alumni feedback based on curriculum:

- Considering alumni suggestions, initiatives have been taken to increase internship opportunities through industry partnerships.
- Industry collaboration has been strengthened via MoUs, guest lectures, and seminars.
- The curriculum also supports lab-based innovation, including the adoption of virtual labs, to promote innovation and practical skill development.

Employer feedback based on curriculum:

- Based on employer feedback, examination reforms have been implemented by adopting diverse assessment patterns (1, 2, 4, and 10 mark questions) to evaluate different cognitive levels.
- Experiential learning methods, such as group discussions and project-based learning, are integrated into courses.
- The curriculum encourages enrollment in MOOC/SWAYAM/NPTEL courses, with added focus on value education and Indian Knowledge Systems (IKS).
- To improve student engagement, interactive teaching-learning strategies, including the flipped classroom approach, have been introduced.

These initiatives ensure that students receive a well-rounded education that prepares them for the professional world, keeping them updated with the latest industry trends and technologies.


Registrar

Dr. P. THIRUMALVALAVAN,
 Registrar,
 Noorul Islam Centre for Higher Education,
 Kumaracoli - 629 180, Thuckalay,
 Kanyakumari District.


HOD

Dr. R. Mathu Soothana S. Kumar,
 Head Dept. of Information Technology,
 Noorul Islam Centre for Higher Education,
 Kumaracoli, Thuckalay - 629 180.

1.2.2 Curriculum Structure (10)

Institute Marks : 10.00

[Edit](#)

ID	Course Code	Course Title	Classroom Instruction (CI) (in hours per semester)		Lab Instruction (LI) (in hours per semester)	Term Work (TW) and Self Learning (SL) (TW+ SL) (in hours per semester)	Total no. of Hours per semester	Total Credits (C)* (Total Hours/30)
			L	T	P	SL		
1	EG3101	Technical English	60	30	0	30	120	4.00
2	MA3101	Engineering Mathematics – I	60	30	0	30	120	4.00
3	BS3101	Engineering Physics	60	0	0	30	90	3.00
4	BS3102	Engineering Chemistry	60	0	0	30	90	3.00
5	CS3101	Fundamentals of Computing and Python Programming	60	0	0	30	90	3.00
6	CS3171	Fundamentals of Computing and Python Programming Laboratory	0	0	30	30	60	2.00
7	BS3171	Physics and Chemistry Laboratory	0	0	30	30	60	2.00
8	EG3102	Communicative English	60	0	0	30	90	3.00
9	MA3102	Engineering Mathematics – II	60	30	0	30	120	4.00
10	BE3101	Basic Electrical and Electronics Engineering	60	0	0	30	90	3.00
11	BE3102	Basic Civil and Mechanical Engineering	60	0	0	30	90	3.00
12	ME3101	Engineering Graphics	60	0	30	30	120	4.00
13	BE3171	Basic Electrical and Electronics Engineering Laboratory	0	0	30	0	30	1.00
14	BE3172	Basic Civil and Mechanical Engineering Laboratory	0	0	30	0	30	1.00

15	MA3201	Engineering Mathematics III	60	30	0	30	120	4.00
16	IT3201	Computer System Architecture	60	0	0	30	90	3.00
17	IT3202	Digital Principles and Design	30	30	0	30	90	3.00
18	IT3203	Object Oriented Programming using C++	30	30	0	30	90	3.00
19	IT3204	Principles of Communication	60	0	0	30	90	3.00
20	IT3205	Data Structures	30	30	0	30	90	3.00
21	IT3271	Data Structures Laboratory	0	0	30	0	30	1.00
22	IT3272	Digital Laboratory	0	0	30	0	30	1.00
23	IT3273	Object Oriented Programming using C++ Laboratory	0	0	30	0	30	1.00
24	MA3204	Statistics and Numerical Methods	30	30	0	30	90	3.00
25	BS3201	Environmental Studies	45	0	0	15	60	2.00
26	IT3206	Data Communication and Computer Networks	60	0	0	30	90	3.00
27	IT3207	Database System Concepts	60	0	0	30	90	3.00
28	IT3208	Operating System Concepts	60	0	0	30	90	3.00
29	IT3209	Software Engineering Principles	60	0	0	30	90	3.00
30	IT3274	Data Communication and Computer Networks Laboratory	0	0	30	0	30	1.00
31	IT3275	Database Systems Laboratory	0	0	30	0	30	1.00
32	IT3276	Operating System Concepts Laboratory	0	0	30	0	30	1.00
33	IT32P1	Summer Internship-I	0	0	30	30	60	2.00

34	MS3201	Professional and Business Ethics	45	0	0	15	60	2.00
35	IT3210	Information Security Basics	60	0	0	30	90	3.00
36	IT3211	Embedded Systems and IOT	60	0	0	30	90	3.00
37	IT3212	Object Oriented Analysis and Design	30	30	0	30	90	3.00
38	IT3213	Fundamentals of Java Programming	30	30	0	30	90	3.00
39	IT32B1	Cryptography and Network Security	60	0	0	30	90	3.00
40	IT3277	Embedded Systems and IOT Laboratory	0	0	30	0	30	1.00
41	IT3278	Object Oriented Analysis and Design Laboratory	0	0	30	0	30	1.00
42	IT3279	Java Programming Laboratory	0	0	30	0	30	1.00
43	AI32D1	Fundamentals of Artificial Intelligence	60	0	0	30	90	3.00
44	IT3214	Cyber Forensics Basics	60	0	0	30	90	3.00
45	IT3215	Web Programming	60	0	0	30	90	3.00
46	IT3216	Full Stack Web Development	30	30	0	30	90	3.00
47	IT32A2	Cyber law and Cyber Crime Investigation	60	0	0	30	90	3.00
48	IT32A5	Machine Learning	60	0	0	30	90	3.00
49	IT3280	Cyber Security Laboratory	0	0	30	0	30	1.00
50	IT3281	Web Programming Laboratory	0	0	30	0	30	1.00
51	IT3282	Full Stack Web Development Laboratory	0	0	30	0	30	1.00
52	IT32P2	Summer Internship-II	0	0	30	30	60	2.00

53	MS3202	Principles of Management	45	0	0	15	60	2.00
54	IT3217	Cloud Computing Essentials	60	0	0	30	90	3.00
55	IT32A1	Cyber Forensics and Incident Response	60	0	0	30	90	3.00
56	IT32A3	Ethical Hacking	60	0	0	30	90	3.00
57	EC32D2	Wireless Communication Techniques	60	0	0	30	90	3.00
58	IT3283	Cyber Forensics Lab	0	0	30	0	30	1.00
59	IT3284	Cloud Computing Essentials Lab	0	0	30	0	30	1.00
60	IT32P3	Project -I (Machine Learning)	0	0	60	30	90	3.00
61	IT32A4	Intrusion Detection and Prevention System	60	0	0	30	90	3.00
62	IT32A7	Biometric Image Processing	60	0	0	30	90	3.00
63	IT35P1	Project Work - II	0	0	150	150	300	10.00
		Total	2205	330	840	1485	4860	162.00

1.2.3 Components of Curriculum (5)

Institute Marks : 5.00

Course Components	Curriculum Content (% of total number of credits of the program)	Total number of contact hours	Total number of credits
Basic Sciences	15.1	52.00	25.00
Basic Engineering	6.6	14.00	12.00
Humanities and Social S	7.2	11.00	13.00
Program Core	48.0	147.00	74.00
Program Electives	9.9	18.00	15.00
Open Electives	2.0	3.00	3.00
Project(s)	11.2	32.00	17.00
Internships/Seminars	0	0.00	3.00
Any other (Please specif	0	0.00	0.00
Total number of Credits			162.00

1.2.4 Strategies for Education Reforms (5)

Institute Marks : 5.00

The Department of Information Technology has adopted well-defined strategies for implementing education reforms in line with NBA guidelines, NEP-2020, and emerging global practices. The focus is on flexibility, multidisciplinary learning, innovation, and lifelong learning.

Multidisciplinary and Interdisciplinary Curriculum Design

The curriculum is designed to promote multidisciplinary and interdisciplinary learning by offering:

- Open Electives from allied disciplines such as Electronics, Mechanical, Management, Mathematics, and Humanities
- Interdisciplinary Program Electives in emerging areas like Artificial Intelligence, Data Science, Cyber Security, IoT, and Healthcare Informatics
- Project-based learning, mini-projects, and capstone projects involving multiple domains. These initiatives enable students to integrate knowledge across disciplines and solve real-world problems effectively.

Mapping of Activities with Curriculum Design

Academic activities such as internships, industrial training, certification courses, hackathons, technical workshops, seminars, and MOOCs are mapped with Course Outcomes (COs), Program Outcomes (POs), and Program Specific Outcomes (PSOs). This ensures experiential learning, skill development, and attainment of graduate attributes prescribed by NBA and the Washington Accord.

Academic Bank of Credits (ABC)

The department supports the Academic Bank of Credits (ABC) framework to provide flexibility in learning. Students are encouraged to:

- Earn credits through approved online courses (NPTEL, SWAYAM, Coursera, etc.)
- Transfer and accumulate credits as per institutional and regulatory norms. This system promotes mobility, personalized learning pathways, and lifelong learning.

APAAR (Academic Performance, Achievement and Records)

The department facilitates the implementation of APAAR by maintaining systematic digital records of:

- Academic credits
- Skill-based certifications
- Co-curricular and extra-curricular achievements

This ensures transparent documentation of students' academic and professional progress.

Continuous Quality Improvement (CQI)

Feedback from students, alumni, employers, and industry experts is continuously analysed through DAB meetings. The insights obtained are used to refine curriculum content, teaching-learning practices, and assessment methods, thereby ensuring continuous improvement and relevance of the program.

1.3 PO, PSO and their Mapping with Courses (20)

Total Marks 20.00

1.3.1 POs and PSOs (5)

:

PSO1	To apply the knowledge of basic sciences, engineering and information technology to provide solutions for complex Engineering problems.
PSO2	To apply technical knowledge and use of modern tools for solving problems in web development, network and cloud management, cyber security and forensics, artificial intelligence, machine learning and cryptography.
PSO3	Comprehend the lifelong learning on technological advancement and practice professional ethics in concern for social well-being.

1.3.2 Mapping between the Courses and POs/PSOs (15)

Institute Marks : 15.00

PO:

PO Number	List of Courses
PO1	Engineering Mathematics – I, Engineering Mathematics – II, Engineering Mathematics – III, Statistics and Numerical Methods, Engineering Physics, Engineering Chemistry, Fundamentals of Computing and Python Programming, Computer System Architecture, Data Structures
PO2	Fundamentals of Computing and Python Programming, Python Programming Laboratory, Object Oriented Programming using C++, Data Structures, Fundamentals of Java Programming, Web Programming, Full Stack Web Development, Fundamentals of Artificial Intelligence, Machine Learning, Programming and Computing Laboratories
PO3	Software Engineering Principles, Object Oriented Analysis and Design, Information Security Basics, Cryptography and Network Security, Cyber Forensics Basics, Cyber Forensics and Incident Response, Intrusion Detection and Prevention System, Full Stack Web Development, Project – I, Project Work – II
PO4	Cyber Forensics Basics, Cyber Law and Cyber Crime Investigation, Cyber Forensics and Incident Response, Ethical Hacking, Information Security Basics
PO5	Environmental Studies, Embedded Systems and IoT, Fundamentals of Artificial Intelligence, Cloud Computing Essentials, Wireless Communication Techniques
PO6	Professional and Business Ethics, Ethical Hacking, Cyber Law and Cyber Crime Investigation, Cyber Forensics Basics
PO7	Principles of Management, Summer Internship – I, Summer Internship – II, Project – I, Project Work – II, All Laboratory Courses
PO8	Technical English, Communicative English, Engineering Graphics, Software Engineering Principles, Project – I, Project Work – II
PO9	Principles of Management, Software Engineering Principles, Object Oriented Analysis and Design, Project – I, Project Work – II
PO10	Fundamentals of Artificial Intelligence, Machine Learning, Cloud Computing Essentials, Biometric Image Processing, Intrusion Detection and Prevention System, Internships and Projects

PSO:

PO Number	List of Courses
PSO1	Fundamentals of Computing and Python Programming, Python Programming Laboratory, Object Oriented Programming using C++, Data Structures, Data Structures Laboratory, Database System Concepts, Database Systems Laboratory, Software Engineering Principles, Object Oriented Analysis and Design, Java Programming, Web Programming, Full Stack Web Development, Machine Learning, Fundamentals of Artificial Intelligence, Project – I, Project Work – II
PSO2	Computer System Architecture, Digital Principles and Design, Operating System Concepts, Operating System Concepts Laboratory, Data Communication and Computer Networks, Data Communication and Computer Networks Laboratory, Cloud Computing Essentials, Cloud Computing Essentials Laboratory, Information Security Basics, Cryptography and Network Security, Cyber Forensics Basics, Cyber Forensics and Incident Response, Intrusion Detection and Prevention System, Cyber Security Laboratory, Summer Internship – I, Summer Internship – II
PSO3	Environmental Studies, Embedded Systems and IoT, Embedded Systems and IoT Laboratory, Wireless Communication Techniques, Principles of Communication, Ethical Hacking, Cyber Law and Cyber Crime Investigation, Biometric Image Processing, Professional and Business Ethics, Principles of Management, Project – I, Project Work – II

1.4 Course Outcomes and Course Articulation Matrix (30)

Total Marks 30.00

1.4.1 Course Outcome (Semester Wise) (15)

Institute Marks : 15.00

No. of Core Courses : 6	C2 : 2	C3 : 2	C4 : 2
-------------------------	--------	--------	--------

Note : Number of Outcomes for a Course is expected to be around 6.

Course Code :	IT3201	Semester :	3
----------------------	---------------	-------------------	----------

Course Outcome	Statements
IT3201.1	Understand the basic components and interconnection structures of computer
IT3201.2	Apply the concepts of fast address to perform signed operand multiplication and division
IT3201.3	To know how an instruction gets executed by the components of a processor
IT3201.4	Get familiar on the various types of memory like RAM, ROM, Virtual memory and cache memory
IT3201.5	Evaluate the design considerations of a multiple processor in handling parallel processing

Course Code :	IT3203	Semester :	3
----------------------	---------------	-------------------	----------

Course Outcome	Statements
IT3203.1	Understand the basic concepts of Object-Oriented Programming
IT3203.2	Use classes, constructors, destructors and operator overloading and the Standard Template Library in C++
IT3203.3	Map an object-oriented program design into the class and template model of C++
IT3203.4	Understand how to apply the major object-oriented concepts to implement object-oriented programs in C++, encapsulation, inheritance and polymorphism.
IT3203.5	Program low-level input and output routines and streaming input and output operators in C++

Course Code :	IT3207	Semester :	4
----------------------	---------------	-------------------	----------

Course Outcome	Statements
IT3207.1	Students are able to understand the fundamentals of Database Management Systems.
IT3207.2	Students have the ability to work with relational models, Structured Query Language.
IT3207.3	Students are able to understand the fundamentals of file storage, indexing techniques, transaction processing and concurrency control.
IT3207.4	Students are able to work with distributed databases.
IT3207.5	Students are able to secure the databases

Course Code :	IT3206	Semester :	4
----------------------	---------------	-------------------	----------

Course Outcome	Statements
IT3206.1	Describe the functions of OSI model and Transmission media.
IT3206.2	Gain knowledge in data link layer mechanism and IEEE standards and apply them to construct LAN network.
IT3206.3	Analyze how to assign the IP addresses for the given network and packet flow on the basis of routing protocols.
IT3206.4	To get exposed with transport protocols and use socket programming skills to communicate them.
IT3206.5	Understand and design application layer protocols for internet applications.

Course Code :	IT3211	Semester :	5
----------------------	---------------	-------------------	----------

Course Outcome	Statements
IT3211.1	Understand the core concepts of embedded systems
IT3211.2	Gain a good idea about the embedded processors, and programming in Embedded C
IT3211.3	Get to know about Internet of Things along with edge, fog and cloud computing.
IT3211.4	Able to work with Arduino and Raspberry Pi
IT3211.5	Design IoT applications using Arduino/Raspberry Pi /open platform

Course Code :	IT3212	Semester :	5
----------------------	---------------	-------------------	----------

Course Outcome	Statements
IT3212.1	Understand object-oriented software development life cycle and different types of object-oriented methodologies.
IT3212.2	Able to identify classes, their relationships and also describe the static structure of the system being modeled.
IT3212.3	Able to describe the components of the system having dynamic behavior by different UML diagrams.
IT3212.4	Understand the different design patterns and how to apply them.
IT3212.5	Implement the project and do object-oriented testing.

1.4.2 Course Articulation Matrix (15)

:

1 . course name : C2IT3201

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C2IT3201.1	Understand	3 ✓	1 ✓	2 ✓	3 ✓	3 ✓	2 ✓	2 ✓	1 ✓	2 ✓	3 ✓	- ✓
C2IT3201.2	Apply the c	3 ✓	3 ✓	2 ✓	3 ✓	2 ✓	1 ✓	- ✓	1 ✓	3 ✓	3 ✓	- ✓
C2IT3201.3	To know ho	2 ✓	3 ✓	3 ✓	3 ✓	3 ✓	2 ✓	2 ✓	3 ✓	2 ✓	3 ✓	- ✓
C2IT3201.4	Get familiar	3 ✓	2 ✓	2 ✓	2 ✓	3 ✓	1 ✓	- ✓	3 ✓	2 ✓	2 ✓	- ✓
C2IT3201.5	Evaluate th	3 ✓	3 ✓	3 ✓	2 ✓	2 ✓	- ✓	3 ✓	3 ✓	3 ✓	3 ✓	- ✓
Average		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2 . course name : C2IT3203

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C2IT3203.1	Understand	3 ✓	2 ✓	2 ✓	3 ✓	2 ✓	2 ✓	2 ✓	3 ✓	3 ✓	3 ✓	- ✓
C2IT3203.2	Use classe	3 ✓	2 ✓	2 ✓	3 ✓	2 ✓	2 ✓	3 ✓	3 ✓	3 ✓	3 ✓	- ✓
C2IT3203.3	Map an obj	3 ✓	2 ✓	2 ✓	3 ✓	2 ✓	2 ✓	3 ✓	3 ✓	3 ✓	3 ✓	- ✓
C2IT3203.4	Understand	3 ✓	3 ✓	3 ✓	3 ✓	2 ✓	2 ✓	3 ✓	3 ✓	3 ✓	3 ✓	- ✓
C2IT3203.5	Program lo	3 ✓	2 ✓	3 ✓	3 ✓	2 ✓	2 ✓	3 ✓	3 ✓	3 ✓	3 ✓	- ✓
Average		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3 . course name : C3IT3207

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C3IT3207.1	Students ar	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	2 ✓	2 ✓	3 ✓	3 ✓	- ✓
C3IT3207.2	Students h	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	2 ✓	3 ✓	3 ✓	- ✓
C3IT3207.3	Students ar	3 ✓	3 ✓	3 ✓	2 ✓	1 ✓	3 ✓	2 ✓	2 ✓	3 ✓	3 ✓	- ✓
C3IT3207.4	Students ar	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	2 ✓	3 ✓	3 ✓	- ✓
C3IT3207.5	Students ar	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	2 ✓	3 ✓	3 ✓	- ✓
Average		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4 . course name : C3IT3206

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C3IT3206.1	Describe th	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	- ✓
C3IT3206.2	Gain knowl	3 ✓	1 ✓	2 ✓	2 ✓	2 ✓	1 ✓	2 ✓	2 ✓	2 ✓	2 ✓	- ✓
C3IT3206.3	Analyze ho	3 ✓	3 ✓	2 ✓	3 ✓	3 ✓	1 ✓	3 ✓	1 ✓	3 ✓	3 ✓	- ✓
C3IT3206.4	To get expc	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	- ✓
C3IT3206.5	Understanc	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	- ✓
Average		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5 . course name : C4IT3211

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C4IT3211.1	Understanc	3 ✓	2 ✓	3 ✓	2 ✓	3 ✓	2 ✓	3 ✓	3 ✓	3 ✓	3 ✓	- ✓
C4IT3211.2	Gain a goo	3 ✓	2 ✓	2 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	- ✓
C4IT3211.3	Get to kno	3 ✓	1 ✓	2 ✓	2 ✓	2 ✓	2 ✓	2 ✓	2 ✓	2 ✓	2 ✓	- ✓
C4IT3211.4	Able to wor	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	- ✓
C4IT3211.5	Design IoT	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	3 ✓	- ✓
Average		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

6 . course name : C4IT3212

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C4IT3212.1	Understanc	2 ✓	3 ✓	3 ✓	2 ✓	1 ✓	2 ✓	3 ✓	3 ✓	3 ✓	3 ✓	- ✓
C4IT3212.2	Able to ider	2 ✓	3 ✓	3 ✓	2 ✓	1 ✓	2 ✓	3 ✓	3 ✓	3 ✓	3 ✓	- ✓
C4IT3212.3	Able to des	2 ✓	3 ✓	3 ✓	2 ✓	1 ✓	2 ✓	3 ✓	3 ✓	3 ✓	3 ✓	- ✓
C4IT3212.4	Understanc	2 ✓	3 ✓	3 ✓	2 ✓	1 ✓	2 ✓	3 ✓	3 ✓	3 ✓	3 ✓	- ✓
C4IT3212.5	Implement	2 ✓	3 ✓	3 ✓	2 ✓	1 ✓	2 ✓	3 ✓	3 ✓	3 ✓	3 ✓	- ✓
Average		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

1 . Course Name : C2IT3201

Course	PSO1	PSO2	PSO3
C2IT3201.1	3 ✓	3 ✓	2 ✓
C2IT3201.2	3 ✓	3 ✓	2 ✓
C2IT3201.3	3 ✓	3 ✓	2 ✓
C2IT3201.4	3 ✓	3 ✓	2 ✓
C2IT3201.5	3 ✓	3 ✓	2 ✓
Average	0.00	0.00	0.00

2 . Course Name : C2IT3203

Course	PSO1	PSO2	PSO3
C2IT3203.1	3 ✓	3 ✓	3 ✓
C2IT3203.2	3 ✓	3 ✓	3 ✓
C2IT3203.3	2 ✓	2 ✓	2 ✓
C2IT3203.4	3 ✓	3 ✓	3 ✓
C2IT3203.5	3 ✓	3 ✓	3 ✓
Average	0.00	0.00	0.00

3 . Course Name : C3IT3207

Course	PSO1	PSO2	PSO3
C3IT3207.1	3 ✓	3 ✓	2 ✓
C3IT3207.2	3 ✓	3 ✓	2 ✓
C3IT3207.3	3 ✓	3 ✓	2 ✓
C3IT3207.4	3 ✓	3 ✓	2 ✓
C3IT3207.5	3 ✓	3 ✓	2 ✓
Average	0.00	0.00	0.00

4 . Course Name : C3IT3206

Course	PSO1	PSO2	PSO3
C3IT3206.1	3 ✓	3 ✓	2 ✓
C3IT3206.2	3 ✓	3 ✓	2 ✓
C3IT3206.3	3 ✓	3 ✓	2 ✓
C3IT3206.4	3 ✓	3 ✓	2 ✓
C3IT3206.5	3 ✓	3 ✓	2 ✓
Average	0.00	0.00	0.00

5 . Course Name : C4IT3211

Course	PSO1	PSO2	PSO3
C4IT3211.1	3 ✓	3 ✓	3 ✓
C4IT3211.2	3 ✓	3 ✓	3 ✓
C4IT3211.3	3 ✓	3 ✓	3 ✓
C4IT3211.4	3 ✓	3 ✓	3 ✓
C4IT3211.5	3 ✓	3 ✓	3 ✓
Average	0.00	0.00	0.00

6 . Course Name : C4IT3212

Course	PSO1	PSO2	PSO3
C4IT3212.1	3 ✓	3 ✓	3 ✓
C4IT3212.2	3 ✓	3 ✓	3 ✓
C4IT3212.3	3 ✓	3 ✓	3 ✓
C4IT3212.4	3 ✓	3 ✓	3 ✓
C4IT3212.5	3 ✓	3 ✓	3 ✓
Average	0.00	0.00	0.00

1.5 Program Articulation Matrix (5)

Total Marks 5.00

Program Articulation Matrix

:

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
MA3201	1.6	1.4	1	1.6	0.6	0	3	0.2	1	0.8	PO11
IT3201	2.8	2.4	2.4	2.6	2.6	1.2	1.4	2.2	2.4	2.8	PO11
IT3202	3	3	2.2	2.2	2.2	2.8	3	3	2.2	2.2	PO11
IT3203	3	2.2	2.4	3	2	2	2.8	3	3	3	PO11
IT3204	2.4	2.4	2.6	2.8	2.8	3	2.8	2.6	0.8	2.2	PO11
IT3205	3	3	2.2	2.2	3	0.8	3	1.2	3	3	PO11
IT3271	3	3	3	2	3	0.8	3	2	3	3	PO11
IT3272	2.6	2.6	2.4	2.6	3	2.2	3	1.6	3	3	PO11
IT3273	3	2.6	2.6	3	2	2	2.8	3	3	3	PO11
MA3204	3	3	2	2	2.8	2.8	1.6	1.2	3	1.4	PO11
BS3201	3	3	3	3	2	2	3	3	3	3	PO11
IT3206	2.8	2.4	2.4	2.6	2.6	1.2	1.4	2.2	2.4	2.8	PO11
IT3207	3	3	3	2.8	2.6	3	2.6	2	3	3	PO11
IT3208	2.2	2.4	1.8	2	1.4	1.2	1.2	2.2	1.4	2.2	PO11
IT3209	2.8	2.4	2.4	2.6	2.6	1.2	1.4	2.2	2.4	2.8	PO11
IT3274	3	3	2.6	2.8	3	2.6	2.6	2.4	3	2.8	PO11
IT3275	3	3	3	3	3	1.4	2	2	3	3	PO11
IT3276	2.6	2.6	2.4	2.6	3	2.2	3	1.6	3	3	PO11
IT32P1	3	3	2.6	2.8	3	2.6	2.6	2.4	3	2.8	PO11
MS3201	3	3	3	2	1	1	3	3	3	3	PO11
IT3210	2.8	2.4	2.4	2.6	2.6	1.2	1.4	2.2	2.4	2.8	PO11
IT3211	3	2.6	2.6	2.8	2.8	2.2	2.8	2.4	2.8	2.8	PO11
IT3212	2	3	2.2	2	1	2	3	3	3	3	PO11
IT3213	2.8	2.4	2.4	2.6	2.6	1.2	1.4	2.2	2.4	2.8	PO11
IT32B1	3	3	3	2	1	1	3	3	3	3	PO11
IT3277	3	2.6	2.6	2.6	2.8	2.4	2.8	2.8	2.8	3	PO11

IT3278	3	2.6	2.8	3	3	2.8	2.6	2.6	2.6	2.6	PO11
IT3279	3	2.4	2.6	3	2	2	2.8	3	3	3	PO11
AI32D1	2.2	2.8	2.8	3	2	3	2.4	2	3	3	PO11
IT3214	2.8	2.4	2.4	2.6	2.6	1.2	1.4	2.2	2.4	2.8	PO11
IT3215	3	3	3	2	3	3	3	2	3	3	PO11
IT3216	3	3	2.2	2.2	3	0.8	3	1.2	3	3	PO11
IT32A2	3	3	3	2	1	1	3	3	3	3	PO11
IT32A5	3	2.6	3	3	3	2	3	2.6	2.8	2.8	PO11
IT3280	2.8	2.8	2.4	3	2	3	3	3	2	3	PO11
IT3281	3	3	3	2.2	3	3	3	2	3	3	PO11
IT3282	3	2.8	2.8	2.6	3	2.2	2	2.6	3	3	PO11
IT32P2	3	3	2.6	2.8	3	2.6	2.6	2.4	3	2.8	PO11
MS3202	2	1.8	2.6	1	2	3	1	2.4	2	1.8	PO11
IT3217	2.8	2.8	2.4	2.6	2	2	1.8	2.4	2.2	2.6	PO11
IT32A1	2.8	2.4	2.4	2.6	2.6	1.2	1.4	2.2	2.4	2.8	PO11
IT32A3	2.8	2.4	2.4	2.6	2.6	1.2	1.4	2.2	2.4	2.8	PO11
EC32D2	3	3	3	2	3	3	3	2	3	3	PO11
IT3283	2.8	2.8	2.4	3	2	3	3	3	2	3	PO11
IT3284	2	2.8	2.4	2.2	2	1.6	2.6	2.8	2.6	2.6	PO11
IT32P3	3	3	2	1.6	1	1.6	3	2.6	3	3	PO11
IT32A7	3	3	3	3	2.4	2.2	3	2.8	2	2.6	PO11
IT32A4	3	3	2	1	1.8	0	3	2.6	3	3	PO11
IT32P5	3	3	2	1	1.6	1	3	2.6	3	3	PO11

Course Code	PSO1	PSO2	PSO3
BE3101	3	3	2
CS3101	2.8	2.8	2.8

IT3201	3	3	2
IT3203	3	3	2
MA3101	3	3	2
ME3101	3	3	3

2 OUTCOME-BASED TEACHING LEARNING (120)

Total Marks 120.00

2.1 Describe Processes Followed to Ensure Quality of Teaching & Learning (20)

Total Marks 20.00

To enhance the effectiveness of the teaching–learning process, a structured and outcome-oriented approach is adopted with a focus on academic planning, innovative pedagogy, and continuous improvement. Various academic, instructional, and student-support initiatives are systematically implemented to ensure quality education and holistic student development.

Compliance with the academic schedule

At the beginning of each semester, a Calendar of Academic Planner is prepared and circulated by PVC-Academics. It outlines key dates, including the commencement and conclusion of the semester, the schedule for practical and theoretical examinations, and the start of the subsequent semester. This calendar indicates the total number of working days in the semester, including all holidays, dates for internal assessment examinations, and important co-curricular and extracurricular activities. Events such as seminars, guest lectures, industrial visits, workshops etc are scheduled in accordance with the academic calendar to enhance the teaching-learning process.

JUL 2025

SUN	MON	TUE	WED	THU	FRI	SAT
		1	2 FWD	3	4	5
6	7	8	9	10	11	12
	4	5	6	7	8	
13	14	15	16	17	18	19
	9	10	11	12	13	
20	21	22	23	24 LH	25	26
	14	15	16	LH	17	
27	28	29	30	31		
	18	19	20	21		

Date	Activity
2-07-2025	Instruction Begins for S5 and S7 Classes.
04-07-2025	Formation of Class /Programme / Course Committees .
07-07-2025	First Class Committee Meeting for informing the Regulations and Course Committee Meeting to decide the scheme of evaluation
24-07-2025	LH - Aadi Amavasai
30-07-2025	First Programme Committee Meeting to review the syllabus coverage details

AUG 2025

SUN	MON	TUE	WED	THU	FRI	SAT
					1 ST1	2
3	4 ST1	5 ST1	6 ST1	7 ST1	8 ST1	9
10	11	12	13	14	15	16
	28	29	30	31		
17	18 IPT-1	19	20	21	22	23
	32	33	34	35	36	
24	25	26	27	28	29	30
	37	38		39	40	
31						

Date	Activity
01-08-2025	Commencement of First Series Test for S5, S7 UG Classes.
11-08-2025	Review of First Series Test and submitting the report.
15-08-2025	Independence Day
16-08-2025	Krishna Jeyanthi
18.08.2025	Internal Practical Test -I
27-08-2025	Vinayakar Chathurthi

SEP 2025

SUN	MON	TUES	WED	THU	FRI	SATU
	1	2	3	4	5	6
	41	42	OH	OH	OH	OH
7	8	9	10	11	12	13
	OH	OH	43	44	45	
14	15	16	17	18	19	20
	46	47	ST2	ST2	ST2	
2	22	23	24	25	26	27
	ST2	ST2	ST2	ST2	ST2	
2	29	30				
	56	57				

OCT 2025

SUN	MON	TUE	WED	THU	FRI	SAT
			1	2	3	4
5	6	7	8	9	10	11
	58	59	60	61	62	
12	13	14	15	16	17	18
	63	64	65	66	67	
19	20	21	22	23	24	25
			68	69	70	
26	27	28	29	30	31	
	71	72	73	74	75	

Date	Activity
03-09-2025 to 09-09-2025	OH (3-9)- Onam Holidays, 05-Miladi Nabi
15-09-2025 to 20-09-2025	Payment of Odd Semester Examination Fee
22-09-2025 to 26-09-2025	Payment of Odd Semester Examination Fee with fine
15-09-2025	Second Programme Committee Meeting to review the syllabus coverage details
17-09-2025	Series Test -II
26-09-2025	Review of Second Series Test Performance and Submitting the report.

Date	Activity
01-10-2025	Saraswathi Pooja Holiday
02-10-2025	Gandhi Jeyanthi
03-10-2025	Holiday
20-10-2025	Deepavali
21-10-2025	
23-10-2025	Internal Practical Test – II
30-10-2025	Third Programme Committee Meeting to review syllabus coverage details.

NOV 2025						
SUN	MON	TUE	WED	THU	FRI	SAT
						1
2	3 ST3 76	4 ST3 77	5 ST3 78	6 ST3 79	7 ST3 80	8
9	10 ST3 81	11 82	12 LWD 83	13 84	14 85	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

DEC 2025						
SUN	MON	TUE	WED	THU	FRI	SAT
	1	2	3	4	5	6
7	8	9		11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Date	Activity
01-11-2025	Formation of K.K. Dist
03-11-2025	Series Test – III / Model Exam
11-11-2025	Review of Model Examination Performance
12-11-2025	Last Day of Instruction
17-11-2025	Commencement of End Semester University Examination

Date	Activity
	University Exams
03-12-2025	St. Xavier Church Festival (LH)
From 24-12-2025	Semester Holidays

Fig. 2.1.1 University Academic Schedule 2025-2026 Odd Semester

Course Planning and Execution

Subjects are initially assigned to faculty members based on their specialization and willingness. The timetable coordinator prepares the semester timetable, and each faculty member prepares the course delivery plan for the subjects allocated to them. The faculty members maintain a Record of Academic Work for each subject they are handling. The Record of Academic Work includes the

- Department Vision and Mission
- Programme Outcomes (POs)
- Course Outcomes (COs)
- Mapping of COs with POs
- Syllabus of the Subject
- Instructional Delivery Plan
- Evaluation Plan
- Course Delivery Plan
- Subject Coverage Details
- Textbooks, Reference Books, Web Resources
- Students Attendance Record

- Laboratory List of Experiments
- Major Equipment / Software required for conducting the Lab
- Laboratory Experiments Completion Details
- Course Outcome Distribution & Bloom's Taxonomy Distribution in Question Papers
- Remedial Actions Taken Report
- Course Attainment

Each Record of Academic Work is periodically reviewed by the Head of the Department and the PVC-Academics which is periodically reviewed by the HOD. The teaching-learning process is evaluated based on these records. Additionally, academic audits examine all documentation related to course planning, delivery, and assessment to ensure strict adherence to the Academic Schedule.

Pedagogical Strategies:

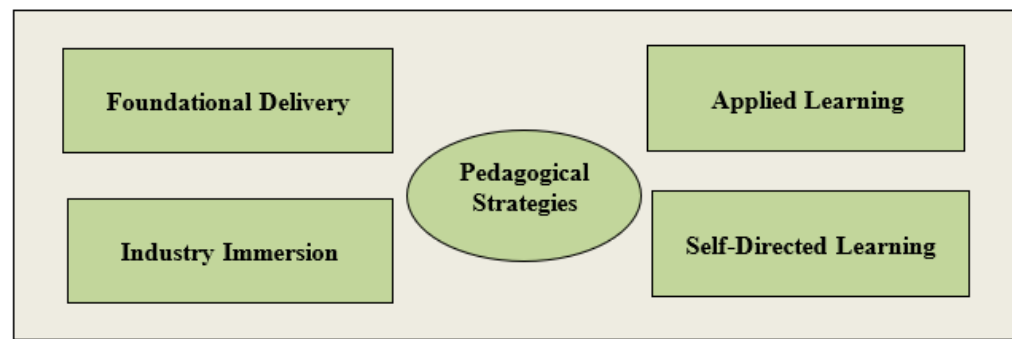


Fig. 2.1.2 Holistic Teaching-Learning Approach

• Foundational Delivery

Core learning is delivered through ICT-enabled teaching using LCD projectors and interactive tools, supported by faculty-prepared course materials. Lecture sessions are supplemented with presentations to enhance conceptual understanding. Lecture notes, assignments, and reference materials are shared to the student which ensures uniform content delivery, promotes active learning, and strengthens students' foundational knowledge in alignment with course outcomes.

• Applied Learning

Students engage in assignments-based problem solving and Project-Based Learning (PBL) to apply theoretical concepts to practical challenges, supporting Outcome-Based Education (OBE). In the seventh semester, students undertake a mini-project to identify and solve domain-specific problems under faculty guidance. In the eighth semester, students carry out a comprehensive main project involving problem analysis, design, implementation, testing, and documentation, integrating knowledge from multiple courses. The final-year project addresses real-world engineering or societal problems and is carried out under close faculty supervision, with industry involvement wherever feasible, to enhance professional skills and Programme Outcome attainment.

• Industry Immersion

The gap between academia and industry is bridged through expert lectures and industrial visits, providing students with exposure to real-world professional environments and current industry practices. Industry professionals share insights on emerging technologies, tools, and workplace expectations. These interactions help students understand practical applications of theoretical concepts, enhance career awareness, and strengthen industry-relevant skills in alignment with Programme Outcomes.

• Self-Directed Learning

Lifelong learning is fostered by integrating NPTEL and SWAYAM online courses, encouraging students to explore topics independently beyond the prescribed syllabus. Students are motivated to enroll in certification courses, complete assessments, and apply the acquired knowledge in assignments and projects. This approach promotes self-learning, adaptability, and continuous professional development in alignment with Outcome-Based Education.

Faculty Performance Review and Development

Teaching effectiveness is assessed through student feedback, peer reviews, academic audits, and performance appraisal. Faculty members are encouraged to participate in Faculty Development Programs (FDPs), PDPs, Workshops, Seminars, Guest lectures and Certification programs to continuously enhance their teaching and technical competencies.

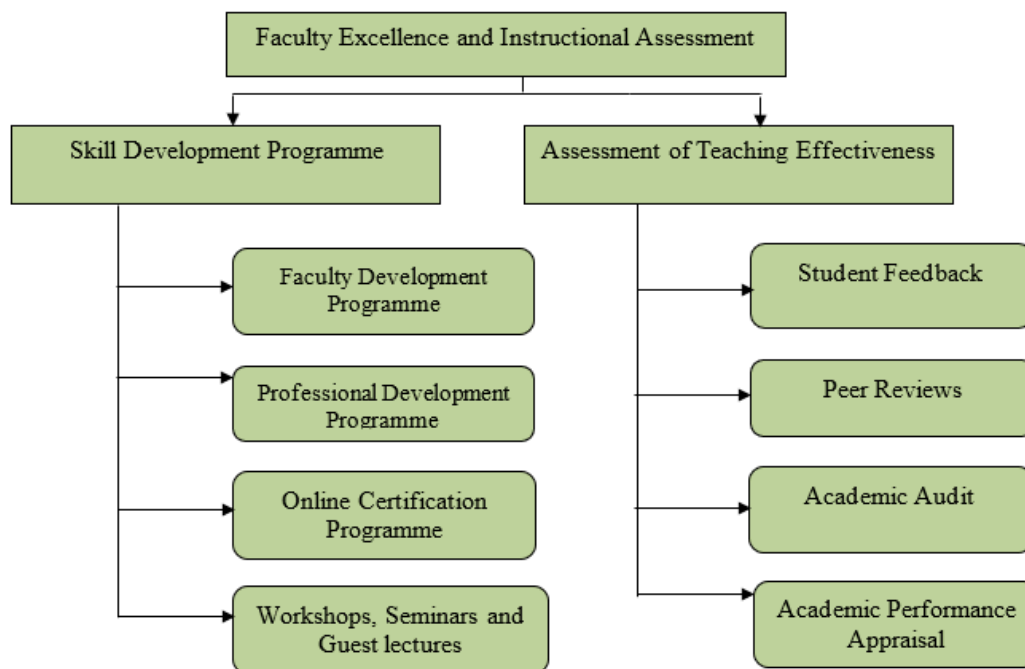


Fig. 2.1.3: Faculty Performance Evaluation and Professional Development Framework

Learning Resources and Infrastructure Support

The department provides a conducive learning environment through:

- Well-equipped smart classrooms
- Modern computing and software laboratories
- Central library and e-learning resources
- Industry interaction and project-based learning facilities

Continuous Assessment and Outcome Analysis

Student performance is continuously evaluated through internal tests, assignments, quizzes, laboratory evaluations, seminars, and project reviews. CO attainment levels are computed at the end of each semester. The outcome analysis forms the basis for identifying learning gaps and planning corrective actions.

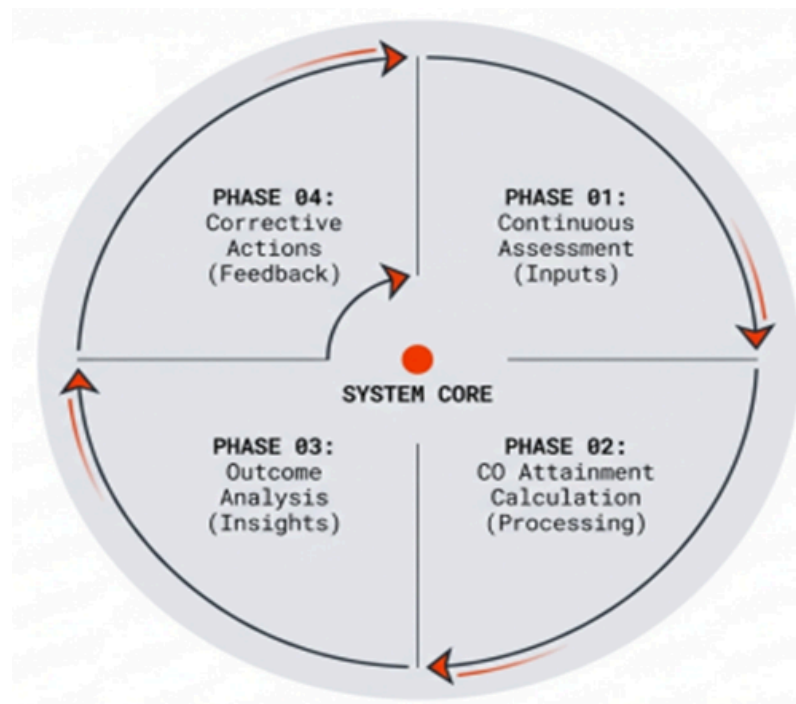


Fig. 2.1.4 Enrichment and Recognition Programmes for Meritorious Students

Identification of Bright and Weak Students

Students are systematically identified as bright or weak based on their performance in internal assessments and university examinations. Classroom participation, questioning ability, and level of conceptual understanding are also considered. In addition, laboratory performance, including practical skills, experiment completion, and record maintenance, is used as a key criterion to assess students' overall academic proficiency.

Initiatives for Bright Students



Fig. 2.1.5 Enrichment and Recognition Programmes for Meritorious Students.

The Academic Excellence and Skill Advancement Initiatives aim to enhance students' knowledge, skills, leadership qualities, and motivation through focused academic enrichment and continuous encouragement.

i. Advanced Academic Enrichment Activities

Bright students are encouraged to participate in technical symposiums, conferences, and competitive events to enhance their technical knowledge, innovation skills, and exposure to emerging technologies.



Fig. 2.1.6 Mithun Sathya P S receiving the best paper award for his paper presentation in the National Conference on Innovations in Computing Technologies

ii. Online Certification Courses

Students are encouraged to enroll in certification and online courses offered through platforms such as NPTEL, SWAYAM Coursera, and other MOOC providers to strengthen technical skills and promote self-learning.

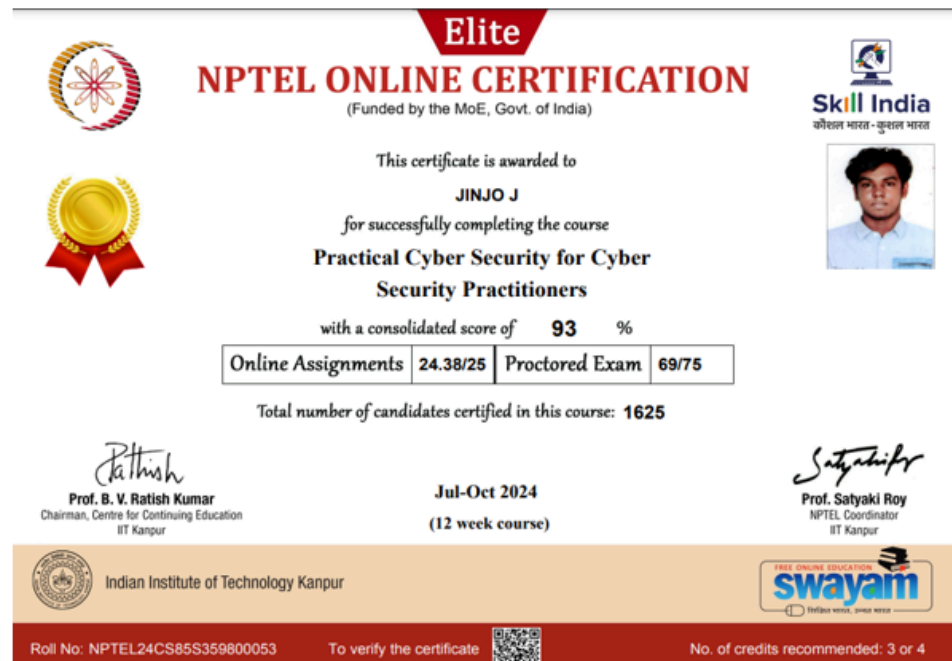


Fig. 2.1.7 Jinjo J, Final Year Student of IT Department certified in NPTEL course on Practical Cyber Security for Cyber Security Practitioners.

iii. Leadership Roles and Responsibilities

Advanced learners are encouraged to take up leadership roles in group activities, project teams, student associations, and departmental events to develop leadership, teamwork, and communication skills.

**NOORUL ISLAM CENTRE FOR HIGHER EDUCATION, KUMARACOIL
DEPARTMENT OF INFORMATION TECHNOLOGY
ACADEMIC YEAR 2025-26 ODD SEMESTER
CLASS COMMITTEE III**

Circular

This is to inform the class committee members of S5 IT that the third-class committee meeting for S5 IT is scheduled on the 8th of October, 2025 at 1.15 p.m. Kindly attend the class committee meeting.

Chairperson: Dr.Y.Jeyasheela, ASP/IT 

Class Mentor: Dr.S.Maria Celestin Vigila, ASP/IT 

Class Committee Members:

- | | |
|---|--|
| 1. Dr.R.Mathusoothana S.Kumar,Professor&Head | - Member  |
| 2. Dr.S.Maria Celestin Vigila, Associate Professor/IT | - Member  |
| 3. Dr.T.Brindha, Associate Professor/IT | - Member  |
| 4. Dr.M.B.Jayalekshmi, Assistant professor/IT | - Member  |
| 5. Dr. T. V. Sindia, Assistant Professor/IT | - Member  |
| 6. Ms.Abisha, Assistant Professor/Civil | - Member |

Student Representatives

1. Quron Shareef 
2. Bramodh 


HOD
07.10.25

Dr. R. Mathu Soothana S. Kumar,
Head Dept. of Information Technology,
Noorul Islam Centre for Higher Education,
Kumaracoil, Thuckalay - 626 180.

Fig. 2.1.8 Quran Shareef and Bramoth are assigned as Student Representatives for Class Committee Meetings

iv. Motivation and Recognition

Academic excellence is recognized through awards and appreciation during meetings which motivates bright students to consistently perform at higher levels. It also fosters innovation, leadership skills, and higher academic achievements.



Fig. 2.1.9 Nidha Fathima, Student of IT Department receiving the Certificate of Academic Excellence



Fig. 2.1.10 Jinjo J, Final Year Student, Department of Information Technology receiving the award for his academic excellence

Initiatives for Slow Learners

The department follows a structured support mechanism for weak students:

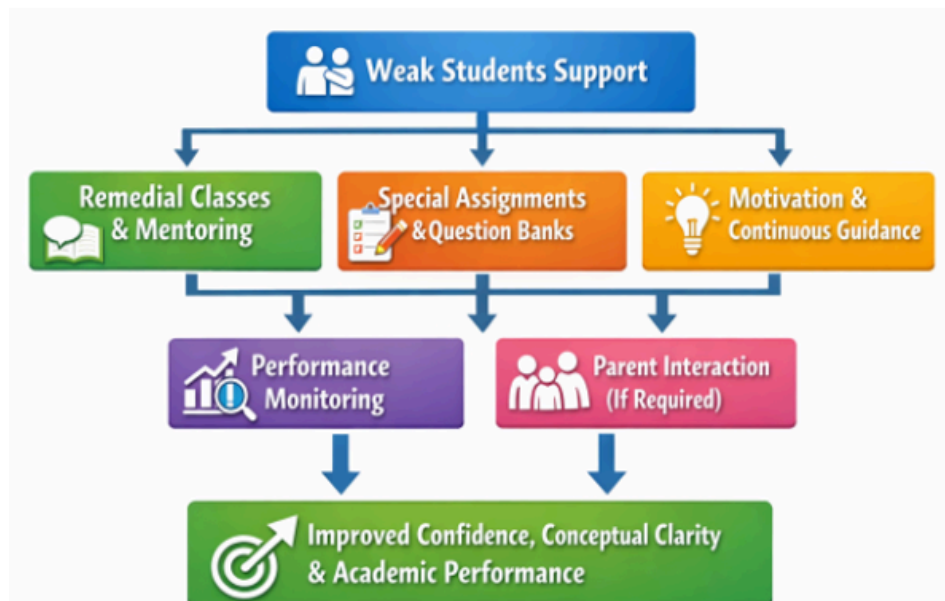


Fig. 2.1.11: Academic Support and Remedial Measures for Slow Learners.

The weak students are supported through remedial classes conducted beyond regular hours, along with effective mentoring and counseling to address their academic and personal difficulties. Specially designed assignments and question banks are provided to strengthen subject understanding, while motivation is enhanced through progressive evaluation and continuous academic guidance. Students' performance is regularly monitored, and interaction with parents is carried out whenever required to ensure consistent improvement and holistic academic support. These initiatives help slow learners improve confidence, conceptual clarity, and academic performance.



DEPARTMENT OF INFORMATION TECHNOLOGY

Remedial classes – Time Table (2024-25 ODD)

Circular

Class: S5 IT

The students are informed that remedial classes for the failures/absentees in **Second Series Test** have been arranged as per the following schedule.

Sl. No	Subject Code / Subject Name	Staff Name	Dates	Signature
1.	MS3201 – Professional and Business Ethics	Dr. Y. Abisha	29-09-2025 & 13-10-2025	
2.	IT3210 – Information Security Basics	Dr. T. Brindha	30-09-2025 & 14-10-2025	
3.	IT3211 – Embedded Systems and IoT	Dr. T. V. Sindia	06-10-2025 & 15-10-2025	
4.	IT3212 – Object Oriented Analysis and Design	Dr. M. B. Jayalekshmi	07-10-2025 & 20-10-2025	
5.	IT3213 – Fundamentals of Java Programming	Dr. R. Mathusoothana S. Kumar	08-10-2025 & 21-10-2025	
6.	IT32B1 – Cryptography and Network security	Dr. S. Maria Celestin Vigila	09-10-2025 & 22-10-2025	

HOD 23.10.25

Dr. R. Mathusoothana S. Kumar,
Head Dept. of Information Technology,
Noorul Islam Centre for Higher Education,
Kumarakoil, Thuckalay - 629 180.

Fig. 2.1.12 Schedule for Remedial Coaching


NICHE KANYAKUMARI
 Kumbakonam, Thanjavur, Kanyakumari District, Tamil Nadu-628 180 | info@niche.edu | +91 9486856101, 04651 250666

NOORUL ISLAM CENTRE FOR HIGHER EDUCATION
 Accredited by NAAC Cycle - B

DEPARTMENT OF INFORMATION TECHNOLOGY

REMEDIAL CLASS

ACADEMIC YEAR : 2025-26

Semester and Class : 851T, V Semester
 Subject Name with Code : IT3211, Embedded Systems and IoT
 Name of the Staff : T.V. Sindia

The following students have scored less marks in the Series Test I/II and for their improvement, remedial classes were conducted at 1:20 p.m to 1:50 p.m on 6/10/25 15/10/25.

Roll. No	Name of the Student	Signature of the Student	
		6/10/25	15/10/25
IT204	Aswin A	<i>Aswin A</i>	<i>Aswin A</i>
IT205	Bramoth C	<i>Bramoth C</i>	<i>Bramoth C</i>
IT207	Doran Stanes	<i>Doran Stanes</i>	<i>Doran Stanes</i>
IT208	Hishamullah	<i>Hishamullah</i>	<i>Hishamullah</i>
IT209	Jerin	<i>Jerin</i>	<i>Jerin</i>
IT210	Nagarajan	<i>Nagarajan</i>	<i>Nagarajan</i>
IT212	Salmak Khan	<i>Salmak Khan</i>	<i>Salmak Khan</i>
IT214	Sherbin	<i>Sherbin</i>	<i>Sherbin</i>
IT216	Ayisha Farzana	<i>Ayisha Farzana</i>	<i>Ayisha Farzana</i>
IT217	Abish J S Sharon	<i>Abish J S Sharon</i>	<i>Abish J S Sharon</i>
IT219	Rishvan Prathes	<i>Rishvan Prathes</i>	<i>Rishvan Prathes</i>

Signature of the Staff : T.V. Sindia
 AP/IT

Signature of the HOD : Dr. R. Mathu Soothana S. Kumar
 Head Dept. of Information Technology,
 Noorul Islam Centre for Higher Education,

Fig. 2.1.13 Attendance Sheet for Remedial Class.

Annex 09 03 00

Name : Tejio Shiba T
 Roll No : 27005 Semester: VIII
 Reason for Counseling: Poor performance in first series test
 Reason given by Student: Not study well
 Comments by Staff Advisor: He was advised to study well for the next series test
 Date : 06/03/2025 Student Signature: [Signature]

Name : Livingston S
 Roll No : 27006 Semester: VIII
 Reason for Counseling: Poor performance in first series test
 Reason given by Student: Not study well
 Comments by Staff Advisor: He was advised to secure good marks in all the subjects for the next series test
 Date : 06/03/2025 Student Signature: [Signature]

Name : Narain N
 Roll No : 27007 Semester: VIII
 Reason for Counseling: Poor performance in first series test
 Reason given by Student: Not study well
 Comments by Staff Advisor: He was advised to spend more time on studies and secure good marks
 Date : 06/03/2025 Student Signature: [Signature]

Fig.2.1.14 Counseling report of Weak Students.

2.2 Quality of Student Capstone Project (25)

Total Marks 25.00

The quality of the capstone/major project is ensured through a structured and systematic implementation process that emphasizes technical rigor, societal relevance, and professional responsibility. As part of the curriculum, students are required to undertake a technical project and submit a comprehensive project report. The project may be carried out either individually or in teams comprising two to three students. Project topics are selected in alignment with the Department's Vision, Mission, and Programme Outcomes.

Identification of Projects and Allocation Methodology

Appointment of Project Coordinators

- The Project Coordinator is appointed by the Head of the Department to oversee and manage the student project work.
- A tentative project review schedule is prepared and communicated to students well in advance.
- The tentative review schedule for the 2021–2025 batch is presented in Fig. 2.2.1.

Project Title		
Project Area		
	Student	Internal Guide
Name		
Address		
Email		
Phone (Res & Mobile)		

PROJECT ASSESSMENT

SL. No	Contents	Tentative Date	Mark Allotted
1	Zeroth Review(Abstract)	09-01-25	15
2	Literature Survey	23-01-25	25
3	First Review	12-02-25	20
4	Second review	10-03-25	20
5	Final Review	07-04-25	20
6	Fair Copy of the Report	09-04-25	10
7	Submission of the Final Report [No.of.Copies:4]	15-04-25	15
8	Submission of soft copy of the papers, ppt, source code, executable files, and report in CD format for guide and department.	15-04-25	15
9	Conference (s) / Journal (s) / Certificates	-	10

Signature				
	Student	Supervisor	Coordinator	HOD

Fig. 2.2.1 – Project Tentative Schedule Form**Student Batch Formation**

- Project Coordinators instruct students to form batches according to their area of interest, with a maximum of two students per batch.
- Batch-wise student details along with their domain interests are submitted to the Project Coordinator.

Project Guide Allocation

- The Head of the Department, in consultation with the Project Coordinator, appoints faculty members as project guides for each batch.
- Students are instructed to submit their finalized project titles and attend review meetings as scheduled by the Project Coordinator.

Initiatives

- Students, in consultation with their allotted project guides, explore and finalize project ideas within their chosen domain or area of interest.
- Copies of previous years' project reports are maintained in the Department library to encourage improvement over earlier work and to avoid repetition.

Faculty members further encourage students:

- To undertake in-house projects by utilizing the facilities available within the Department.
- To participate in project exhibitions by providing platforms to showcase their innovations and project outcomes.
- To publish their work in reputed journals and conferences.

Types and Relevance of Projects

- Based on the functional area and nature of work, projects are categorized as:
 - o Application-oriented projects
 - o Research-oriented projects
 - o Projects addressing industrial problem statements
- Students with the guidance of the supervisors undertake projects in research level, projects towards product and projects in applied engineering.

Table 2.2.1 Number of projects implemented in research, product and application areas

Sl.No.	Year	Type	Number of projects
1	2024-2025	Application	12
2	2023-2024	Application	08
3	2022-2023	Application	09

The sample front page of the project report



NOORUL ISLAM CENTRE FOR HIGHER EDUCATION
Kumaracoll - 629 180, Kanyakumari District, Tamil Nadu, India
www.nicuniv.com | info@nicuniv.com
+91-9486856101, 04651-250566

**DIGITAL IMAGE INTEGRITY VERIFICATION THROUGH
CYBER FORENSIC**

PROJECT REPORT

Submitted by

SIBIN S

Register No: 1121213013

SREE VARDHAN M S

Register No: 1121213014

*In partial fulfillment for the award of the degree
of*

**BACHELOR OF TECHNOLOGY
IN
INFORMATION TECHNOLOGY**



**DEPARTMENT OF INFORMATION TECHNOLOGY
NOORUL ISLAM CENTRE FOR HIGHER EDUCATION**

Kumaracoll , Thuckalay,Tamilnadu,India

April- 2025


NICHE KANYAKUMARI
DEEMED-TO-BE UNIVERSITY

NOORUL ISLAM CENTRE FOR HIGHER EDUCATION
Kumaracoil - 629 180, Kanyakumari District, Tamil Nadu, India
 www.niuniv.com info@niuniv.com
 +91-9486856101, 04651-250566

DEPARTMENT OF INFORMATION TECHNOLOGY
PROJECT WORK

This is to certify that the project entitled **"DIGITAL IMAGE INTEGRITY VERIFICATION THROUGH CYBER FORENSIC"** is a bonafide record of project work done by **SIBIN S, SREE VARDHAN M S**, Register No: **1121213011, 1121213014** of B.Tech (INFORMATION TECHNOLOGY) during the year 2024-2025.

[Signature]
Project Guide
 Dr. T. Brindha, B.Tech, M.E, Ph.D.
 Associate Professor
 Department of Information Technology
 NICHE
 Kumaracoil

[Signature]
Head of the Department
 Dr R. Mathusoothana. S. Kumar, M.E, Ph.D.
 Professor and Head
 Department of Information Technology
 NICHE
 Kumaracoil

Submitted for the Project Viva voice examination held on *06/05/2025*

[Signature]
Internal Examiner

[Signature]
External Examiner

Contribution of project work towards attainment of POs

- All academic projects are systematically mapped to the Programme Outcomes (POs) and Programme Specific Outcomes (PSOs).
- Each project is evaluated through internal assessment and graded based on its quality, relevance, and level of contribution towards the attainment of POs and PSOs.
- A mapping of student projects, highlighting their relevance and contribution to POs and PSOs, is presented in Table 2.2.2.

Table 2.2.2. Projects and their relevance to POs and PSOs

2021 – 2025 Batch

Batch No.	Student Name	Project Title	Type	Relevance to POs, PSOs
-----------	--------------	---------------	------	------------------------

1	Sajin S S Shibimon S	Fake News Detection from social media using NLP Model	Application (Safety)	PO-A to PO-J PSO1-PSO3
2	Aakaash Mathew B Amith Kingston Elangovan V	Movie Recommendation using Machine Learning based Collaborative Filtering	Application (Society)	PO-A to PO-J PSO1-PSO3
3	Sibin S Sree Vardhan M S	Digital Image Integrity Verification through Cyber Forensics	Application (Safety)	PO-A to PO-J PSO1-PSO3
4	Akshay R	Detecting Cyber Attack in Web Application using Honeypot with Distributed Log Management	Application (Safety)	PO-A to PO-J PSO1-PSO3
5	Jenifer J E Joniya Jeener M M	AI Driven Anomaly Detection in Log Data	Application (Safety)	PO-A to PO-J PSO1-PSO3
6	Jerin Shibu J	Medicine Recommendation System	Application (Smart Healthcare)	PO-A to PO-J PSO1-PSO3
7	Plasius Roy A Gokul R V	Content Management based Online Shopping System	Application (Society)	PO-A to PO-J PSO1-PSO3
8	Livingston S Mohammed Thoufiq A	Product and Price Comparing Tool	Application (Society)	PO-A to PO-J PSO1-PSO3
9	Faiz J Mohamed Afsar M	Pest Recognition using Deep Learning Algorithm	Application (Smart Agriculture)	PO-A to PO-J PSO1-PSO3

10	Navin N Bright Darwin B A	Developing and Implementing Video NFT through Ethereum Blockchain	Application (Society)	PO-A to PO-J PSO1-PSO3
11	Jeffrin J	AI Driven Multimodal Smart Healthcare System: Integrating Pneumonia Detection, IOT based Pulse Monitoring and Patient Assistance Chatbot	Application (Smart Healthcare)	PO-A to PO-J PSO1-PSO3
12	Martin Jino B	Blockchain for Food Traceability	Application (Society)	PO-A to PO-J PSO1-PSO3

2020 – 2024 Batch

Batch No.	Student Name	Project Title	Type	Relevance to POs, PSOs
1	Syed Mohamed Sha S Anith J	YouTube Summarizer using Machine Learning	Application (Society)	PO-A to PO-J PSO1-PSO3
2	Sreeram N Febin W G	Malcheck Building Robust Defenses for Files and Website	Application (Safety)	PO-A to PO-J PSO1-PSO3
3	Chandru Mon M S S Rodin Mitro	AI Driven Adaptive Cyber Defense System for Android Malware Detection using Explainable AI	Application (Safety)	PO-A to PO-J PSO1-PSO3

4	Afrith A Mashik Absar Dheen	Facial Web Authentication	Application (Society)	PO-A to PO-J PSO1-PSO3
5	Vishalini J	Heart Disease Prediction using Random Forest Classification	Application (Smart Healthcare)	PO-A to PO-J PSO1-PSO3
6	Mohammed Sharibu M Akash Roy L	Adaptive Boosting Algorithm based on Wine Quality Prediction	Application (Society)	PO-A to PO-J PSO1-PSO3
7	Anglo C Jebin S	Crime based Information Detection System	Application (Safety)	PO-A to PO-J PSO1-PSO3
8	Subhasri S	DNA Chaos based Cryptosystem for Securing Medical Images	Application (Safety)	PO-A to PO-J PSO1-PSO3

2019 – 2023 Batch

Batch No.	Student Name	Project Title	Type	Relevance to POs, PSOs
1	Akshara D P	Fake Currency Detection with Machine Learning	Application (Safety)	PO-A to PO-J PSO1-PSO3
2	Nabeel Basheer M Mohammed Abdul Rahim Mohamed Ashfak A	Realistic Facial Animation and Speech Cloning	Application (Society)	PO-A to PO-J PSO1-PSO3
3	Numshad Alikhan Mohammed Sajad	Home Automation Device using IOT	Application (Society)	PO-A to PO-J PSO1-PSO3

4	Ansar S Sonu S	Exploring Different Deep Learning Models for Accurate Bitter Melon Crop Yield Prediction	Application (Society)	PO-A to PO-J PSO1-PSO3
5	Sivamya A S Anu Priya S S	Synthesizing Artistic Image from Audio using Stable Diffusion and Whisper	Application (Society)	PO-A to PO-J PSO1-PSO3
6	Abdullah S Arun Kumar R	Text Summarization using Machine Learning	Application (Society)	PO-A to PO-J PSO1-PSO3
7	Muhammad Arhab M S Litvin C	Pneumonia Detection using Deep Learning	Application (Smart Healthcare)	PO-A to PO-J PSO1-PSO3
8	Jenifa J Autlin Abi A	Prediction of heart disease using Machine Learning	Application (Smart Healthcare)	PO-A to PO-J PSO1-PSO3
9	Aslaha J.S. Meera Ashima B S	Sign Language Recognition using Deep Learning	Application (Society)	PO-A to PO-J PSO1-PSO3

Process for Monitoring and Evaluation

Each project group is assigned a faculty guide for continuous monitoring and mentoring throughout the project duration. Periodic reviews are conducted at predefined stages such as problem definition, literature survey, system design, implementation, testing, and final demonstration. The evaluation process includes assessment of project documentation, progress presentations, and demonstration of working models or prototypes, wherever applicable. This structured review mechanism ensures timely completion of projects and continuous quality improvement.

A review panel comprising two to three faculty members from different domains is constituted for project evaluation. A total of four reviews are conducted during the project development period.

Zeroth Review

During the Zeroth Review, the project team identifies the project domain and defines the problem within the selected domain. The following documents, duly approved by the Project Guide, are submitted to the Project Coordinator:

- Project Title
- Abstract

Literature Review

The project literature review is carried out in the relevant project area. The reviewed literature, along with the Project Guide's approval, is submitted to the Project Coordinator.

First Review

In the First Review, the project team delivers a detailed presentation on the problem identified based on the literature survey. The list of project modules, work plan, and details of collected data are discussed and evaluated.

Second Review

In the Second Review, the team presents the selected technical stack, partial implementation of the project, and incorporates the suggestions provided during the First Review.

Final Review

The Final Review consists of a comprehensive project presentation along with a live demonstration of the working model or prototype. The team presents conclusions, outcomes, and possible future enhancements of the project. The project is demonstrated to the review panel for final evaluation.

Upon successful completion of all reviews, students are permitted to prepare the project report in the prescribed format.

- The project report is reviewed and corrected by the respective faculty guides to ensure accuracy, authenticity, and proper structure.
- After successful completion of corrections, students are permitted to bind and submit the final project report.
- Students are asked to publish their project work and present the project in Conferences/Symposium.
- Internal assessment marks are awarded based on the cumulative evaluation scores obtained during the periodic reviews.
- End-semester project examination is conducted with internal and external examiners appointed by the COE.
- Individual and team performance are assessed and evaluated by supervisor, coordinator and review committee as per the Rubrics given below in Table 2.2.3.

Table 2.2.3 Rubrics for Project Evaluation

Review #	Agenda	Review Assessment Mark
Zeroth Review	Selection of Domain	15
Literature Review	Literature Survey Evaluation	25
First Review	Project Proposal	20
Second Review	Design Methodology	20
Final Review	Project Simulation / Demonstration	20
Internal Evaluation		100

Process to Assess Student Project Performance

The performance of individual team members is assessed during review presentations based on the following criteria:

- Communication skills
- Confidence and clarity in project work
- Overall individual contribution to the project

The overall project performance is evaluated based on:

- Depth of knowledge and individual student contributions
- Team coordination and integration of work
- Time management and adherence to schedules
- Quality and effectiveness of the final project output

2.3 Internship/Industrial Training (10)

Total Marks 10.00

Process

The department ensures that all students undergo Internship / Industrial Training as part of the curriculum to gain practical exposure and industry-oriented skills.

The process is as follows:

1. The department identifies reputed industries, R&D organizations, startups, and government organizations through MoUs and industry networks.
2. Students are informed about internship opportunities through notices, emails, and mentoring sessions.
3. Students apply to industries relevant to their domain with approval from the Internship Coordinator / Head of Department.
4. Mentor provides guidance and monitoring and assure the participation of all the students
5. During the internship, students maintain a daily log/diary and submit periodic progress updates.
6. On completion, students submit:
 - i. Internship report
 - ii. Completion certificate from the industry
 - iii. Presentation/Viva-voce evaluated by a departmental committee
7. Minimum duration:
 - i. For Sem 4: Minimum 2 weeks
 - ii. For Sem 6: Minimum 4 weeks
8. When conducted:
 - i. Summer vacation after II/III year
 - ii. Semester break
9. Credits: 2
10. Assessment Method

Evaluation is carried out based on:

 - i. Internship report quality
 - ii. Industry supervisor feedback
 - iii. Student presentation and viva-voce
11. Rubrics are used to ensure transparent and uniform evaluation.

POs/PSOs Addressed

POs: PO7, PO8, PO9, PO10, PO11, PO12

PSOs: PSO2, PSO3

Table 2.3.1 List of students undertaking Field projects/internships/Research projects/Field visit 2024-2025

Sl.N o.	Name	Register Number	Title of the Internship	Place of the Work	Duration
1.	Abisheake M	1122213002	SQL	Wikipolt Softwares, Nagercoil	16 th June 2025 to 30 th June-2025
2.	Al Mubeen	1122213003	Front End Development	Innovace Technology, Thanjavur	16 th June 2025 to 30 th June-2025
3.	Anas Mohamed Sali	1122213004	Full stack development	Ace Wix, Nagercoil	11 th June 2025 to 30 th June 2025
4.	Andrew Rojan A	1122213005	Front End Developer Intern	IQ Business Growth, Nagercoil	16 th June 2025 to 1 st July 2025
5.	Anil Kumar A S	1122213006	Cyber Security	Wikipolt Softwares, Nagercoil	16 th June 2025 to 30 th June-2025
6.	Anwar Ahamed.A	1122213007	Front End Development	Innovace Technology, Thanjavur	16-June-2025 to 30-June-2025
7.	Arockia Andrew E	1122213008	Ethical Hacking and Penetration Testing	ITDesk, Marthandam	15 th June 2025 to 30 th June-2025
8.	Brodin T K	1122213010	UI/UX	ITDesk, Marthandam	9 th June 2025 to 27 th June-2025
9.	Thakkarai Peer Mohamed J	1122213011	Full stack development	Ace Wix, Nagercoil	11 th June 2025 to 30 th June 2025
10.	Janish Ram J S	1122213012	Full Stack Development	Wiztech Automation Solutions, Chennai	10 th June 2025 to 26 th June-2025
11.	Jinjo J	1122213013	Ethical Hacking and Penetration Testing	ITDesk, Marthandam	15 th June 2025 to 30 th June-2025
12.	Mithun Sathya P S	1122213015	App Development (Flutter)	Metaloop Global IT services, Kochi	23 rd June 2025 to 29 th June-2025
13.	Mohamed Mubeen A	1122213017	Frontend development	Oqtis Soft, Chennai	16 th June 2025 to 1 st July 2025
14.	Mohamed Shadath M S	1122213018	Cyber security-vulnerabilities in web application	Iron cloud technologies	16 th June 2025 to 30 th June-2025
15.	Mohamed Sharukhan A	1122213019	Frontend development	Oqtis Soft, Chennai	16 th June 2025 to 30 th June-2025

16.	Mohamed Tharish S	1122213020	Frontend development	Oqtis Soft, Chennai	16 th June 2025 to 30 th June 2025
17.	Mohammed Anash M R	1122213021	Frontend development	Oqtis Soft, Chennai	16 th June 2025 to 1 st July 2025
18.	Mohideen Pichai A	1122213022	Frontend development	Oqtis Soft, Chennai	16 th June 2025 to 1 st July 2025
19.	Nilofer Mehak S	1122213023	Data Analytics	Spicy Technologies	23 rd June 2025 to 5 th July 2025
20.	Nithisa Devi J	1122213024	Cyber Security	POSTULATE INFO TECH PRIVATE LIMITED	16 th June 2025 to 1 st July 2025
21.	Noufal Naushad	1122213025	Cyber security and Ethical hacking	Metaloop Global IT services, Kochi	23 rd June 2025 to 29 th June-2025
22.	Pavithra A	1122213026	Cyber Security	POSTULATE INFO TECH PRIVATE LIMITED	16 th June 2025 to 1 st July 2025
23.	Peju Wilson W	1122213027	Cyber security	Wikpolt Softwares, Nagercoil	16 th June 2025 to 30 th June-2025
24.	Sanjai C	1122213028	Front End Development	Innovace Technology, Thanjavur	16 th June 2025 to 29 th June-2025
25.	Segu Abdulla M	1122213029	Front End Development	Innovace Technology, Thanjavur	16 th June 2025 to 29 th June-2025
26.	Sivasakthivel M	1122213030	Front End Development	PCS Solutions, Surandai	12 th June 2025 to 30 th June-2025
27.	Sreejith R	1122213031	Front End Developer Intern	IQ Business Growth, Nagercoil	16 th June 2025 to 1 st July 2025
28.	Sulthan Sikkanthar Batch S	1122213032	Front End Development	Innovace Technology, Thanjavur	16 th June 2025 to 29 th June-2025
29.	Thaaj M S	1122213033	Data Analytics using python	Hexacent Pvt. Ltd., Ernakulam	12 th June 2025 to 28 th June 2025
30.	Bejin B.V	1123313001	Ethical Hacking and Penetration Testing	ITDesk, Marthandam	15 th June 2025 to 30 th June-2025

2023-2024

Sl. No	Name of the student	Project/Internship / Field visit	Place of work	Date
1	Abisheake M	Internship	Inbox Learners Hub	10/06/2024 to 26/06/2024
2	Al Mubeen A	Internship	WizBees, Chennai	25/06/2024(2 weeks)
3	Anas Mohamed Sali	Internship	Alric Infotech Pvt Ltd, TVM	4/06/2024 to 27/06/2024
4	Andrew Rojan A	Internship	CDAC, TVM	10/06/2024 to 1/07/24
5	Anl Kumar A S	Internship	Inbox Learners Hub	10/06/24 to 26/06/24
6	Anwar Ahmed A	Internship	WizBees, Chennai	27/06/24(2 weeks)
7	Arockia Andrew E	Internship	CDAC, TVM	10/06/2024 to 1/07/24
8	Brodin T K	Internship	Alric Infotech Pvt Ltd, TVM	4/06/2024 to 27/06/2024
9	J Thakkarai Peer Mohammed	Internship	WizBees, Chennai	25/06/24(2 weeks)
10	Janish Ram J S	Internship	Elysium Technologies Private Ltd., Madurai	3/06/2024 to 22/06/2024
11	Jinjo J	Internship	CDAC, TVM	10/06/2024 to 1/07/24
12	Midhun Sathya P S	Internship	Inbox Learners Hub	10/06/2024 to 26/06/2024
13	Mohammed Mubin A	Internship	WizBees, Chennai	4/06/2024 to 2/07/2024
14	Mohammed Sadath M S	Internship	Iron claud	25/06/2024(2 weeks)
15	Sharukhan A	Internship	WizBees, Chennai	25/06/2024(2 weeks)

16	Mohammed Tharish S	Internship	WizBees, Chennai	5/06/2024 to 22/06/2024
17	Mohammed Anash M R	Internship	Mazz Apps Technologies, Tuticorin	25/06/2024(2 weeks)
18	Mohideen Pichai A	Internship	WizBees, Chennai	3/06/2024 to 20/06/2024
19	Nilofer Mehak S	Internship	Synnefo Solutions	10/06/2024 to 29/06/2024
20	Nithisa Devi J	Internship	Jelly soft, Tuticorin	10/06/2024 to 24/06/2024
21	Noufal Naushad	Internship	Skycrave Digital mMarketing company, Chennai	10/06/2024 to 29/06/2024
22	Pavithra A	Internship	Jelly Soft, Chennai	
23	Peju Wilson W	Internship	Alric Infotech Pvt Ltd, TVM	4/06/2024 to 27/06/2024
24	Sanjai C	Internship	WizBees, Chennai	25/06/2024(2 weeks)
25	Segu Abdulla M	Internship	WizBees, Chennai	25/06/2024(2 weeks)
26	Sivasakthivel M	Internship	PCS software solutions, Thenkasi	3/06/2024 to 21/06/2024
27	Sreejith R	Internship	CDAC, Trivandrum	10/06/2024 to 1/07/2024
28	Sulthan Sikkandar Batcha S	Internship	Wizbees, Chennai	25/06/2024(2 weeks)
29	Thaaj M S	Internship	Synnefo solutions	3/06/2024 to 21/06/2024
30	Bejin B V	Internship	ITDesk, Marthandam	4/06/2024 to 26/06/2024
31	Amith Kingston Elangovan V	Internship	Cyber Forensics Secutity Solutions	5/06/2024 to 28/06/2024

32	Bright Darwin B A	Internship	Cyber Forensics Security Solutions	5/06/2024 to 28/06/2024
33	Gokul R V	Internship	J Click solutions , Nagercoil	3/06/2024 to 18/06/2024
34	Jeniffer J E	Internship	Technohacks Solutions Pvt Ltd	23/05/2024 to 22/06/2024
35	Jerin Shibu J	Internship	J Click solutions , Nagercoil	3/06/2024 to 18/06/2024
36	Livingston S	Internship	Technohacks Solutions Pvt Ltd	23/05/2024 to 22/06/2024
37	Livingston S	Internship	Cyber Forensics Security Solutions	5/06/2024 to 28/06/2024
38	Navin N	Internship	J Click solutions , Nagercoil	3/06/2024 to 18/06/2024
39	Plasius Roy A	Internship	J Click solutions , Nagercoil	3/06/2024 to 18/06/2024
40	Sajin S S	Internship	Technohacks Solutions Pvt Ltd	23/05/2024 to 22/06/2024
41	Shibimon S	Internship	Technohacks Solutions Pvt Ltd	23/05/2024 to 22/06/2024
42	Shibin S	Internship	Alibi,TVM	3/07/2024(1 month)
43	Sreevardhan M S	Internship	Technohacks Solutions Pvt Ltd	23/05/2024 to 22/06/2024
44	Joniya Jeener M M	Internship	Technohacks Solutions Pvt Ltd	23/05/2024 to 22/06/2024
45	Akash Mathew B	Internship	Cyber Forensics Security Solutions	5/06/2024 to 28/06/2024

46	Akshay R	Internship	Technohacks Solutions Pvt Ltd	23/05/2024 to 22/06/2024
47	Jeffrin J	Internship	AK Infopark	4/06/2024 to 19/06/2024
48	Martin Jino B	Internship	J Click Solutions, Nagercoil	3/06/2024 to 18/06/2024
49	Faiz J	Internship	Oqtis Soft	1/06/2024 to 15/06/2024
50	Mohammed Afsar M	Internship	Oqtis soft	1/06/2024 to 15/06/2024
51	Mohammed Thoufiq A	Internship	Oqtis soft	1/06/2024 to 15/06/2024
52	Rodin Mitro	Internship	Alibi, Technopark, TVM	16/01/2024 to 16/2/2024
53	Anith J	Internship	Alibi, Tecnopark, TVM	16/01/2024 to 16/02/2024
54	Chandru S	Internship	Alibi, Technopark, TVM	16/01/2024 to 16/02/2024
55	Subha Sri S	Internship	Alibi, Tecnopark, TVM	16/01/2024 to 16/02/2024
56	Sreeram N	Internship	WOWISO, TVM	13/10/2023 to 16/1/2024

2022-2023

Sl. No	Name of the student	Project/Internship / Field visit	Place of work	Date
1	Shibimon S	Internship	Alibi ,TVM	5/07/2023
2	Sajin S S	Internship	Alibi ,TVM	5/07/2023
3	Sreevardhan M S	Internship	Alibi ,TVM	5/07/2023

4	Sibin	Internship	Srishti Innovative computer systems, TVM	5/06/2023 to 5/07/2023
5	Al Ameen	Internship	Srishti Innovative computer systems, TVM	5/06/2023 to 5/07/2023
6	Joniya Jeener	Internship	Mobiwise Media Labs, Chennai	5/06/2023 to 21/06/2023
7	Bright Darwin B A	Internship	Wibits web solutions, Nagercoil	7/06/2023 to 21/06/2023
8	Jerin Shibu J	Internship	Wibits web solutions, Nagercoil	7/06/2023 to 21/06/2023
9	Navin N	Internship	Wibits web solutions, Nagercoil	16/06/2023 to 03/07/2023
10	Plasius Roy A	Internship	Wibits web solutions, Nagercoil	16/06/2023 to 03/07/2023
11	Amith Kingston	Internship	Wibits web solutions, Nagercoil	16/06/2023 to 03/07/2023
12	Akaash Mathew	Internship	Wibits web solutions, Nagercoil	16/06/2023 to 03/07/2023
13	Akshay R	Internship	Wibits web solutions, Nagercoil	16/06/2023 to 03/07/2023
14	Gokul R V	Internship	Wibits web solutions, Nagercoil	16/06/2023 to 03/07/2023
15	Martin Jino B	Internship	Wibits web solutions, Nagercoil	16/06/2023 to 03/07/2023
16	Jeffrin J	Internship	Wibits web solutions, Nagercoil	7/06/2023 to 03/07/2023
17	M M Mohammed Afsal	Internship	Finscale, Chennai	1/06/2023 to 15/06/2023
18	J Faiz	Internship	Finscale, Chennai	1/06/2023 to 15/06/2023
19	A Mohammed Thoufiq	Internship	Finscale, Chennai	1/06/2023 to 15/06/2023
20	Jenifer J E	Internship	Nxtlogic software solutions, Coimbatore	30/05/2023 to 20/06/2023

21	Ansar S	Internship	Camino Infotech, Ernakulam	22/02/2023 to 25/02/2023
22	Mohammad Sajad	Internship	Camino Infotech, Ernakulam	22/02/2023 to 25/02/2023
23	Numshad Ali Khan	Internship	Camino Infotech, Ernakulam	22/02/2023 to 25/02/2023
24	Sonu S	Internship	Camino Infotech, Ernakulam	22/02/2023 to 25/02/2023
25	Arun Kumar R	Internship	Protel Labs, Chennai	2/01/2023 to 28/01/2023
26	Nabeel basheer	Internship	City Police Office, TVM	14/07/2022 to 23/07/2022
27	Bala Bhaskar B S	Internship	City Police Office, TVM	14/07/2022 to 23/07/2022
28	Mohammed Abdul	Internship	City Police Office, TVM	14/07/2022 to 23/07/2022
29	Sivanya A S	Internship	City Police Office, TVM	14/07/2022 to 23/07/2022

samples





Outcome

The Internship/Industrial Training enables students to bridge the gap between theory and practice, improves practical knowledge, enhances technical competence, and prepares students for professional engineering roles.

2.4 Seminar and Mini/Micro Projects (10)

Total Marks 10.00

Seminars and Mini/Micro Projects are integral components of the curriculum and are systematically implemented to enhance students' technical knowledge, research aptitude, problem-solving skills, and professional competencies.

Process:

Students are required to select seminar topics and mini/micro project ideas relevant to their programme outcomes and emerging trends in technology. Seminar topics are finalized in consultation with faculty mentors, followed by in-depth literature review, preparation of technical content, and formal presentation. Mini/Micro projects are carried out individually or in small teams under faculty supervision, involving problem identification, requirement analysis, design, implementation, and documentation. Continuous monitoring, periodic reviews, and final evaluation are conducted using well-defined rubrics focusing on innovation, technical depth, implementation quality, teamwork, and presentation skills.

POs/PSOs Addressed:

- **PO-A:** Application of engineering knowledge and analytical skills through topic analysis and project execution.
- **PO-B:** Effective use of modern tools, technologies, and software platforms.
- **PO-C & PO-D:** Design and development of feasible solutions for real-world or domain-specific problems.
- **PO-E:** Investigation and research skills through literature survey, data collection, and analysis.
- **PO-F:** Emphasis on plagiarism-free reports, ethical referencing, and responsible use of information.
- **PO-G & PO-H:** Teamwork, communication, and presentation skills through seminars and collaborative projects.
- **PO-I & PO-J:** Promotion of self-learning and lifelong learning skills by exploring recent advancements.
- **PSOs:** Domain-specific skills are strengthened through projects aligned with programme specialization and industry-relevant applications.

In order to create research awareness, third year students are provided with application oriented mini projects and the mapping of student mini projects, highlighting their relevance and contribution to POs and PSOs, is presented in Table 2.4.1.

Table 2.4.1. Mini Projects and their relevance to POs and PSOs

2022 -2026 Batch

Batch No.	Student Name	Project Title	Relevance to POs, PSOs
1.	Abisheake M	Intelligent Car Valuation using Generative AI	PO-A to PO-J PSO1-PSO3
2.	Al Mubeen A	Sentiment Based Movie Recommendation System using Machine Learning	PO-A to PO-J PSO1-PSO3
3.	Anas Mohamed Sali	Focusguard: Real-Time Attention Monitoring using Machine Learning	PO-A to PO-J PSO1-PSO3

4.	Andrew Rojan A	Media Forensic Toolkit	PO-A to PO-J PSO1-PSO3
5.	Anil Kumar A S	A Machine Learning Powered Framework for House Price Prediction	PO-A to PO-J PSO1-PSO3
6.	Anwar Ahamed A	Fake News Detection System using Machine Learning	PO-A to PO-J PSO1-PSO3
7.	Arockia Andrew E	Human Disease Prediction using Machine Learning	PO-A to PO-J PSO1-PSO3
8.	Brodin T K	Heart Disease Prediction using Machine Learning	PO-A to PO-J PSO1-PSO3
9.	J Thakkarai Peer Mohamed	Audio to Text Converter using Natural Language Processing	PO-A to PO-J PSO1-PSO3
10.	Janish Ram J S	Flight Ticket Price Range Classification using Machine Learning	PO-A to PO-J PSO1-PSO3
11.	Jinjo J	Automated Identification of Mitre Attack Techniques using Machine learning	PO-A to PO-J PSO1-PSO3
12.	Mithun Sathya P S	Smart Music Analyzer: A Web-Based Application for Music Genre Prediction and Audio Feature Analysis	PO-A to PO-J PSO1-PSO3
13.	Mohamed Mubeen A	Lung Cancer Detection using CNN in Machine Learning	PO-A to PO-J PSO1-PSO3
14.	Mohamed Shadath M S	Brute- Force Attack Detection using Machine Learning	PO-A to PO-J PSO1-PSO3
15.	Mohamed Sharukhan A	Store Sales Prediction using Machine Learning	PO-A to PO-J PSO1-PSO3
16.	Mohamed Tharish S	Kidney Disease Detection using Machine Learning	PO-A to PO-J PSO1-PSO3

17.	Mohammed Anash M R	Skin Disease Classification using Convolutional Neural Network	PO-A to PO-J PSO1-PSO3
18.	Mohideen Pichai A	Resume Short listing using TF-IDF and Cosine Similarity	PO-A to PO-J PSO1-PSO3
19.	Nilofer Mehak S	Smart Attendance System using Facial Recognition Technology	PO-A to PO-J PSO1-PSO3
20.	Nithisha Devi J	Machine Learning- Based Fake Profile Detection System for Social Media Platforms	PO-A to PO-J PSO1-PSO3
21.	Noufal Naushad	Mindfit AI: The Personalized Workout, Nutrition and Mental Wellness Optimizer	PO-A to PO-J PSO1-PSO3
22.	Pavithra A	Smart Detection of Malicious URLs using Random Forest Algorithm in Machine Learning	PO-A to PO-J PSO1-PSO3
23.	Peju Wilson W	Intelligent Email Fraud& Authenticity Analyzer	PO-A to PO-J PSO1-PSO3
24.	Sanjai C	Plant Disease Detection using Machine Learning	PO-A to PO-J PSO1-PSO3
25.	Segu Abdulla M	AI-Powered Fish Species Identification and Catch Recording System	PO-A to PO-J PSO1-PSO3
26.	Sivasakthivel M	Intelligent Intrusion Detection System using Machine Learning	PO-A to PO-J PSO1-PSO3
27.	Sreejith R	Machine Learning-Based Intelligent Password Strength Evaluation System	PO-A to PO-J PSO1-PSO3
28.	Sultan Sikkandar Batcha S	Diabetes Predicting System using Machine Learning	PO-A to PO-J PSO1-PSO3
29.	Thaaj M S	Skin Predict: A Machine Learning Based Skincare Ingredient Recommendation System	PO-A to PO-J PSO1-PSO3

30.	Bejin B.V	Machine Learning- Based Intelligent Loan Approval Prediction System	PO-A to PO-J PSO1-PSO3
-----	-----------	---	---------------------------

2021 -2025 Batch

Batch No.	Student Name	Project Title	Relevance to POs, PSOs
1.	Amith Kingston Elangovan V	Chatbot using Machine Learning	PO-A to PO-J PSO1-PSO3
2.	Bright Darwin B A	Smart Volume Controller	PO-A to PO-J PSO1-PSO3
3.	Gokul R V	Speech to Text Recognition	PO-A to PO-J PSO1-PSO3
4.	Jenifer J E	Realtime Hand Gesture Recognition for Sign Language using Machine Language	PO-A to PO-J PSO1-PSO3
5.	Jerin Shibu J	Real Time Object Recognition	PO-A to PO-J PSO1-PSO3
6.	Livingston S	AI Image Generator	PO-A to PO-J PSO1-PSO3
7.	N Navin	Face Recognition using Machine Learning	PO-A to PO-J PSO1-PSO3
8.	A Plasius Roy	Calories Burnt Prediction using Machine Learning	PO-A to PO-J PSO1-PSO3
9.	Sajin S S	Malware Detection Using Random Forest Algorithm	PO-A to PO-J PSO1-PSO3

10.	Shibimon S	IPL Score Prediction using Machine Learning	PO-A to PO-J PSO1-PSO3
11.	Sibin S	Email Phishing Detection using Machine Learning	PO-A to PO-J PSO1-PSO3
12.	Sree Vardhan M S	Crop Recommendation System	PO-A to PO-J PSO1-PSO3
13.	Joniya Jeener M M	Anime Recommendation System using Machine Learning	PO-A to PO-J PSO1-PSO3
14.	Aakaash Mathew B	Facial Recognition based Attendance System	PO-A to PO-J PSO1-PSO3
15.	Akshay R	Phishing and Spear Phishing Email Detection using Machine Learning	PO-A to PO-J PSO1-PSO3
16.	Jeffrin J	Facial Emotion Recognition using Machine Learning	PO-A to PO-J PSO1-PSO3
17.	Martin Jino B	Weather Prediction System	PO-A to PO-J PSO1-PSO3
18.	Faiz J	Big Mart Sales Prediction	PO-A to PO-J PSO1-PSO3
19.	Mohamed Afsar M	Image to Cartoon Converter	PO-A to PO-J PSO1-PSO3
20.	Mohammed Thoufiq A	Netflix Movie Recommendation System	PO-A to PO-J PSO1-PSO3

2020 -2024 Batch

Sl. No.	Student Name	Project Title	Relevance to POs, PSOs
1.	A Mashik Absar Dheen	CAT-DOG Classification using Convolutional Neural Networks	PO-A to PO-J PSO1-PSO3

2.	Afrith. S	Predicting results of IPL Matches using Machine Learning	PO-A to PO-J PSO1-PSO3
3.	Akash Roy. L	Social Distancing using YOLO V3 Object Detection	PO-A to PO-J PSO1-PSO3
4.	Chandru Mon. M. S	AI-Driven Adaptive Cyber defense System for ANDROID Malware Detection using Explainable AI	PO-A to PO-J PSO1-PSO3
5.	Febin. W. G	Fake News Detection using Machine Learning	PO-A to PO-J PSO1-PSO3
6.	Mohamed Sharibu. M	Prediction of Wine Quality	PO-A to PO-J PSO1-PSO3
7.	S. Rodin Mitro	Predicting Student's Performance based on Machine Learning	PO-A to PO-J PSO1-PSO3
8.	Sreeram. N	Automated Attendance System using Facial Recognition	PO-A to PO-J PSO1-PSO3
9.	Subhasri. S	Movie Recommendation System using Machine Learning	PO-A to PO-J PSO1-PSO3
10.	Syed Mohamed Sha. A	Credit Card Fraud Detection using Machine Learning	PO-A to PO-J PSO1-PSO3
11.	Vishalni. J	Dog breed Classification using Convolutional Neural Networks	PO-A to PO-J PSO1-PSO3
12.	Anith. J	AI Art Generator using Stable Diffusion	PO-A to PO-J PSO1-PSO3

• Through seminars and mini/micro projects, students gain hands-on experience, improve technical communication, and demonstrate measurable attainment of Programme Outcomes (POs) and Programme Specific Outcomes (PSOs).

2.5 Case Studies and Real-Life Examples (10)

Total Marks 10.00

Case studies and real-time examples are integrated into the teaching–learning process to strengthen students’ understanding of theoretical concepts and their application in real-world scenarios. This approach encourages students to analyse practical problems, identify system requirements, and apply appropriate design methodologies. By working on real-time case studies, students develop analytical, design, and implementation skills, thereby enhancing higher-order cognitive abilities in line with Bloom’s Taxonomy.

Real-time examples from industry-oriented applications are discussed during classroom sessions to help students understand the relevance of object-oriented concepts in software development. Case-based learning promotes active participation, teamwork, and problem-solving skills, contributing effectively to Course Outcome (CO) and Programme Outcome (PO) attainment.

Case Study Given to Students

Title: Vacation Tracking System

Course: Object-Oriented Analysis and Design (OOAD)

Programme / Semester: S5 B.Tech Information Technology

Description:

The Vacation Tracking System is provided as a real-time case study to S5 B.Tech IT students as part of the Object-Oriented Analysis and Design course. The system is a software application used to manage, record, and monitor employee leave and vacation details within an organization. It addresses practical challenges such as leave approval workflows, employee records management, and policy compliance.

Learning Activities:

Students are required to:

- Identify and analyse functional and non-functional system requirements.
- Represent the system requirements using Use Case Diagrams.
- Design the system architecture using Class Diagrams.
- Model system behavior using State chart Diagrams, Activity Diagrams, and Interaction Diagrams.
- Map the designed models to object-oriented code for implementation.

CO–PO Mapping and Outcomes:

This case study addresses Course Outcomes CO1, CO2, CO3, and CO5. It is mapped to the Programme Outcomes PO-A, PO-B, PO-C, PO-G, PO-H, PO-I, and PO-J. Through this case study, students gain hands-on experience in applying OOAD principles to a real-world problem, thereby improving their system modeling, design, and implementation skills.

Outcome:

The case study enhanced students’ ability to translate real-world requirements into structured object-oriented designs and implement them effectively. It significantly contributed to improved CO attainment and strengthened students’ readiness for industry-level software development tasks.

Number of students registered = 18

The details of the students registered and certified in NPTEL courses are listed in Table 2.6.1.

Table 2.6.1 List of Students Registered and Certified in NPTEL Courses

S.No.	Name of the Student	NPTEL Course Name	Relevance to POs and PSOs
-------	---------------------	-------------------	---------------------------

1	Nithisa Devi J	Practical Cyber Security for Cyber Security Practitioners	PO12, PSO3
2	Pavithra A	Practical Cyber Security for Cyber Security Practitioners	
3	Anil Kumar A S	Practical Cyber Security for Cyber Security Practitioners	
4	Mithun Sathya P S	Practical Cyber Security for Cyber Security Practitioners	
5	Sreejith R	Practical Cyber Security for Cyber Security Practitioners	
6	Nilofer Mehak	Practical Cyber Security for Cyber Security Practitioners	
7	Jinjo J	Practical Cyber Security for Cyber Security Practitioners	
8	Janish Ram	Practical Cyber Security for Cyber Security Practitioners	
9	Mohamed Shadath M S	Practical Cyber Security for Cyber Security Practitioners	
10	Arockia Andrew E	Practical Cyber Security for Cyber Security Practitioners	
11	Nithisa Devi J	Privacy and Security in Online Social Media	
12	Pavithra A	Privacy and Security in Online Social Media	
13	Sreejith R	Privacy and Security in Online Social Media	

14	Nilofer Mehak	Privacy and Security in Online Social Media
15	Andrew Rojan	Privacy and Security in Online Social Media
16	Jinjo J	Privacy and Security in Online Social Media
17	Mithun Sathya P S	Data Analytics with Python
18	Brodin T K	Data Analytics with Python

Sample certificates



Elite

NPTEL ONLINE CERTIFICATION
(Funded by the MoE, Govt. of India)



This certificate is awarded to
MITHUN SATHYA PS
for successfully completing the course
Practical Cyber Security for Cyber Security Practitioners
with a consolidated score of **77** %

Online Assignments	24.38/25	Proctored Exam	52.5/75
--------------------	----------	----------------	---------

Total number of candidates certified in this course: **1625**



Prof. B. V. Ratish Kumar
Chairman, Centre for Continuing Education
IIT Kanpur

Jul-Oct 2024
(12 week course)



Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur



Indian Institute of Technology Kanpur



Roll No: NPTEL24CS85455900418

To verify the certificate

No. of credits recommended: 3 or 4

https://enba.nbaind.org/SARTemplates/eSARUGTierICycle1V1Print.aspx?Appid=11329&Progid=621

114/287



2.7 Solving Complex Engineering Problems Incorporating Sustainability Goals (20)

Total Marks 20.00

The program emphasizes solving complex engineering problems through a blend of project-based learning (PBL), problem-based learning, mini projects, integrated design projects, capstone projects, and activity-based learning. These initiatives are designed to align technical problem-solving with sustainability goals, ethical responsibility, and societal impact, thereby addressing relevant Sustainable Development Goals (SDGs).

1. Core Courses with Project-Based and Problem-Based Learning

Several core courses integrate PBL and problem-based learning approaches where students solve open-ended, real-world engineering problems.

- Students work on case studies and problem statements involving constraints such as energy efficiency, computational efficiency, resource optimization, environmental impact, safety, and cost.
- Learning activities include algorithm design, system modeling, simulation, implementation, and performance analysis using modern computing tools and platforms.
- Sustainability aspects such as energy-aware computing, optimized resource usage, and environmentally responsible solutions are embedded in coursework and assessments.

Relevant SDGs addressed:

- SDG 3 – Good Health and Well-being
- SDG 4 – Quality Education
- SDG 9 – Industry, Innovation and Infrastructure
- SDG 13 – Climate Action

2. Mini / Micro Projects

- Mini projects are introduced in intermediate semesters to bridge theory and practice.
- Students identify and address problems related to smart systems, automation, efficient algorithms, waste reduction, healthcare informatics, agriculture technologies, and social welfare applications.
- Projects involve design, development, testing, and validation of small-scale computing solutions.
- Emphasis is placed on low-cost solutions, energy-efficient algorithms, and ethical use of computing technologies.

Relevant SDGs addressed:

SDG 3 – Good Health and Well-being

SDG 11 – Sustainable Cities and Communities

SDG 12 – Responsible Consumption and Production

3. Integrated Design Projects

- Integrated design projects require students to apply knowledge from multiple CSE core courses to develop holistic and scalable computing systems.
- Team-based projects focus on system design considering functional requirements, safety, sustainability, coding standards, and societal needs.
- Design reviews emphasize life-cycle thinking, scalability, maintainability, and environmental impact of computing solutions.

Relevant SDGs addressed:

- SDG 9 – Industry, Innovation and Infrastructure
- SDG 11 – Sustainable Cities and Communities
- SDG 13 – Climate Action

4. Capstone / Major Projects

- The capstone project represents the culmination of learning, where students solve complex engineering problems through end-to-end implementation.
- Project selection emphasizes industry relevance, societal impact, sustainability, and ethical considerations.
- Students demonstrate working prototypes, simulations, or validated research outcomes.
- Evaluation includes assessment of environmental sustainability, cost-effectiveness, safety, and compliance with standards.

Examples of sustainability-focused themes:

- Energy-efficient computing and green software solutions
- Smart healthcare and assistive technologies
- Sustainable agriculture and water resource management systems
- Intelligent transportation systems and smart city applications

Relevant SDGs addressed:

- SDG 3 – Good Health and Well-being
- SDG 9 – Industry, Innovation and Infrastructure
- SDG 11 – Sustainable Cities and Communities
- SDG 13 – Climate Action

5. Hackathons and Activity-Based Learning

- Students actively participate in hackathons, coding challenges, ideathons, and innovation contests organized by institutions, industries, and professional bodies.
- Problem statements are often aligned with real-world societal challenges, encouraging rapid prototyping and innovative thinking.
- Team-based activities foster collaboration, creativity, leadership, and entrepreneurial skills.

Relevant SDGs addressed:

- SDG 4 – Quality Education
- SDG 8 – Decent Work and Economic Growth
- SDG 9 – Industry, Innovation and Infrastructure

6. Outcomes and Impact

Through these initiatives:

- Students develop the ability to analyze and solve complex engineering problems under realistic constraints.
- Sustainability considerations are embedded in technical decision-making.
- Learners demonstrate innovation, ethical responsibility, teamwork, and lifelong learning.
- The approach ensures effective attainment of Program Outcomes (POs) and Program Specific Outcomes (PSOs) while contributing to national and global sustainability goals.

2.8 Steps Taken for Enhancing Industry Institute Partnerships (15)

Total Marks 15.00

The institute has undertaken several systematic and sustainable initiatives to strengthen Industry–Institute Partnerships with the objective of enhancing employability, practical exposure, research collaboration, and curriculum relevance.

Industry participation is encouraged in curriculum development through expert lectures, workshops, and syllabus revision committees. Regular guest lectures, seminars, and hands-on workshops conducted by industry experts expose students and faculty to current industrial practices and technological advancements. Mandatory internships, industrial training programs, and industrial visits are organized to provide students with real-time industrial exposure and practical skills.

The institute has signed MoUs with reputed industries, startups, R&D organizations, and professional bodies to facilitate:

- Student internships and industrial training
- Joint research and consultancy
- Faculty industrial exposure
- Guest lectures and workshops

Guest lectures and workshops

2024 - 2025

Sl.No	Event Type	Date	Title	Resource Person
1	Workshop	25-09-2024	Dr. J. Jesu Vedha Nayahi, Assistant Professor (Senior Grade), Department of CSE, Anna University, Tirunelveli.	Workshop on "An Insight into Deep learning"

2023 - 2024

Sl.No	Event Type	Date	Title	Resource Person
1	Workshop	25.04.2024	Ms.K.Ulagammal, AI Engineer NetwokZ Systems Nagercoil	Workshop on Embedded Intelligence
2	Workshop	22.03.2024	Mr. A. Rasic, Cyber Security Engineer, Digital University, Technopark, Trivandrum.	"Digital Defenders" – Strengthening Security Awareness
3	Guest lecure	26.10.2023	Dr. Abhirami A, AP/IT, Bannari Amman Institute Of Technology	Guest lecture on Cyber Security

2022 - 2023

Sl.No	Event Type	Date	Title	Resource Person
1	Guest Lecture	18.04.2023	Dr.S.N.Sujith, AI Expert, Networkz Systems, Nagercoil.	Guest Lecture on Machine Learning Diabetes Prediction
2	Workshop	06.03.2023	Mr.A.G.Ajin, Adjunct faculty, Full stack web development, Eureka learning Centre, Nagercoil.	Full stack web development
3	National Level workshop	17.12.2022	Dr.A.J.Deepa, Specialist learning,Trivandrum DC,Infosys	National level workshop on the Microsoft Azure Fundamentals
4	National Level workshop	19.10.2022	Mr.J.S.Sukumar, Industry institute interactive consultant for RedHat Linux & Mr.M.Madan Prasad,RedHat certified instructor and technical trainer from advantage pro,Chennai.	National level workshop on the Power of open source technologies.

MoU

Sl. No	Name of the MoU	Address with State	Department/ University	Dept., Incharge	Start Date	End Date	Purpose of MoU	Name of the Activity	Date of the Activity
---------------	------------------------	---------------------------	-------------------------------	------------------------	-------------------	-----------------	-----------------------	-----------------------------	-----------------------------

1	Networkz Systems	Nagercoil	Information Technology	Ms. R.Chitra	07.09.2023	07.09.2024	Skill Training	Workshop on Embedded Intelligence	25.04.2024
2								Seminar on Internet of Things	10.09.2024
3								Seminar on AGI: The Next Frontier in Human - AI Collaboration	10.10.2024
4	Karka Software Academy	Nagercoil	Information Technology	Ms. R.Chitra	02.09.2023	02.09.2026	Skill Training	Value Added Course on Product Design and Development Life Cycle	2.02.2024 to 29.04.2024
5	IronCloud Technologies	Vetturnimadam, Nagercoil	Information Technology	Ms. R. Chitra	20th March 2025	20th March 2028	Skill Training	Value Added Course on Ethical Hacking - A Practical Approach	05.03.2025 - 06.05.2025

3 OUTCOME-BASED ASSESSMENT (120)

Total Marks 110.00

3.1 Evaluation of Continuous Assessment: Assignments, Unit Tests, Mid-Term, etc. (10)

Total Marks 10.00

The Department follows a structured and transparent Continuous Assessment (CA) process to ensure quality, fairness, and alignment with Course Outcomes (COs) and thereby with Programme Outcomes (POs) and Programme Specific Outcomes (PSOs). Continuous assessment is designed to evaluate students' conceptual understanding, analytical ability, problem-solving skills, and application of knowledge throughout the semester.

1. Components of Continuous Assessment

Continuous assessment typically includes:

Series Tests

Series tests are conducted three times in a semester to evaluate the attainment of the Course Outcomes (COs). Each test is specifically designed to measure how well students have achieved the intended COs for the respective portion of the syllabus.

- Series Test I: Covers the first unit and the first half of the second unit, addressing CO1 and CO2.
- Series Test II: Covers the second half of the second unit and the third unit, addressing CO2 and CO3.
- Series Test III: Covers the fourth and fifth units, addressing CO4 and CO5.

Each series test is conducted for 50 marks, which are then converted to 100 marks for standardization. At the end of the semester, the average of the best two series test scores is taken and scaled to 20 marks for internal assessment. In addition, 5 marks are assigned for student attendance, bringing the total internal marks to 25.

If a CO is found to be not attained in any series test, targeted remedial actions are implemented, such as additional tutorials, guided practice, or mentoring, to address the gaps and ensure improved attainment in subsequent tests and the end-semester examination.

Assignments (individual/group, problem-based, case study, mini-projects)

Assignments are qualitative performance assessment tools designed to evaluate a student's knowledge and application of engineering practices. They provide a metric for assessing analytical thinking, problem-solving abilities, and higher-order cognitive skills in line with Bloom's Taxonomy. Each student is given course-related tasks, and their performance is assessed based on accuracy, approach, and understanding. Assignments complement series tests by providing deeper insights into a student's conceptual grasp and ability to apply knowledge practically.

Lab assessments

Lab courses are practical-oriented components of the curriculum designed to develop students' hands-on skills, application of theoretical concepts, and experimental abilities. Assessment in lab courses focuses on both the process and the outcome of experiments to ensure comprehensive evaluation of student learning.

Lab Assessment Components:

- Lab Performance / Experiment Execution: Students are assessed on their ability to perform experiments accurately, follow procedures correctly, and use laboratory equipment safely.
- Lab Records / Journals: Students maintain lab records or journals documenting observations, experimental procedures, calculations, and results. Assessment ensures accuracy, clarity, and completeness of documentation.
- Viva-Voce / Oral Examination: Students are asked questions related to the experiments, underlying principles, and their results to evaluate conceptual understanding and analytical thinking.
- Lab Assignments / Mini Projects: Some labs include mini-projects or assignments to test creativity, problem-solving skills, and application of multiple concepts.

Internal Practical Tests:

- Two internal practical tests are conducted, each for 100 marks.
 - Practical Test 1: Covers the first half of the experiments in the syllabus.
 - Practical Test 2: Covers the remaining experiments in the syllabus.
- The average of the two tests is calculated and converted to 20 marks.
- An additional 5 marks are assigned for student attendance, making the total internal marks 25.

This structured assessment ensures that students are evaluated on skill, understanding, and consistent performance, while also encouraging active participation in laboratory sessions. Each component contributes to the overall internal assessment marks as per the academic regulations.

2. Constructive Alignment with COs, POs, and PSOs

- For every course, COs are clearly defined and approved by the Board of Studies.
- Question papers for assignments and series tests are mapped explicitly to COs.
- Each question is designed at appropriate Bloom's Taxonomy levels (L1–L6) to assess different cognitive skills.
- CO–PO/PSO mapping ensures that assessment tasks directly support the attainment of program-level outcomes.

3. Quality Assurance in Question Setting

- Question papers are prepared using a model scheme, ensuring balanced coverage of syllabus, COs, and cognitive levels.
- Peer review of question papers is carried out at the department level to maintain academic rigor and uniformity.
- Ambiguity-free, outcome-oriented questions are emphasized.

4. Evaluation Process and Transparency

Answer scripts are evaluated using standardized rubrics and marking schemes aligned with COs. Answer scripts are checked using clear and common marking rules that are prepared in advance. These rules (rubrics and marking schemes) clearly state what points should be written and how many marks are given for each point. Each question is linked to a Course Outcome (CO), so marks are awarded based on how well the student has achieved that outcome. This method ensures that all students are evaluated fairly, consistently, and transparently, and the assessment truly measures the intended learning outcomes.

- Marks are awarded based on predefined criteria to ensure consistency and objectivity.
- Students are informed of evaluation schemes and CO mapping in advance.

Table 3.1.1 Marks allotment indicatively for CO assessment for Theory Courses

COs	Internal Assessment			External Assessment
	ST1	ST2	ST3	End Semester Exam
CO1	30			20
CO2	20	20		20
CO3		30		20
CO4			25	20

CO5			25	20
Total	50	50	50	100

Table 3.1.2 Marks allotment indicatively for CO assessment for Lab Courses

COs	Lab Internal Assessment		External Assessment		
	IT1	IT2	End Exam	Semester	Lab
CO1	20	20		20	
CO2	20	20		20	
CO3	20	20		20	
CO4	20	20		20	
CO5	20	20		20	
Total	100	100		100	

5. Feedback and Corrective Measures

- Evaluated scripts are discussed in class, and constructive feedback is provided to students.
- CO-wise performance analysis is carried out after each assessment.
- Remedial classes, tutorial sessions, and mentoring are conducted for slow learners based on assessment outcomes.

6. Documentation and Course Files

- All assessment-related documents, including question papers, answer keys and mark statements are systematically maintained in course files.
- These records serve as evidence for continuous improvement and accreditation requirements.

7. Continuous Improvement

•Assessment outcomes are reviewed in departmental meetings and class committee meetings and used to refine teaching strategies, assessment methods, and question design in subsequent offerings of the course.

Thus, the continuous assessment process ensures quality, transparency, outcome-based evaluation, and effective measurement of student learning in alignment with COs, POs, and PSOs.

Sample Series test question paper



NOORUL ISLAM CENTRE FOR HIGHER EDUCATION
 @ Kumaracoll - 629 180, Kanyakumari District, Tamil Nadu, India
 @ www.nicuniv.com E3 info@nicuniv.com
 @ +91-9486856101, 04651-250566

DEPARTMENT OF INFORMATION TECHNOLOGY
B. Tech Degree Examinations
Thirud Series Test- April 2024
Eighth Semester
IT22C6 - Intrusion Detection and Prevention System

Time:1 ½ hrs

Max.Marks:50

PART-A(9×2=18)**ANSWER ALL QUESTIONS**

Q.No	Question	Course Outcome	Bloom's Level	Marks
1	Summarize the additional criteria to be considered when selecting agent locations.	C04	L2	2
2	State the need of integrating multiple IDPS technologies and how it can be achieved.	C04	L1	2
3	Define honeypot.	C04	L1	2
4	Differentiate firewall and router.	C04	L2	2
5	State the role of host based IDPS.	C04	L1	2
6	List the different alert modes of snort.	C05	L1	2
7	What is pcap?	C05	L1	2
8	Outline the advantages of using agents in intrusion detection and prevention.	C05	L1	2
9	What is snortsnarf?	C05	L1	2

PART- B(2×16=32)

Q.No	Question	Course Outcome	Bloom's Level	Marks
10.a.	Describe how different IDPS technologies can be integrated.	C04	L2	16
OR				
b.	Summarize the types of events detected by host based IDPS.	C04	L5	16
11.a	With a neat sketch explain the components of snort and its different modes	C05	L4	16
OR				
b.	Illustrate how to write snort rules with example.	C05	L3	16

3.2 Evaluation of the Semester End Exam (SEE) Question Paper (10)

Total Marks 10.00

The Semester End Examination (SEE) is designed and evaluated following a systematic and quality-driven process to ensure fairness, transparency, and alignment with Course Outcomes (COs) and Programme Outcomes (POs) / Programme Specific Outcomes (PSOs).

1. Setting of SEE Question Paper

- The SEE question paper is prepared as per the approved syllabus and academic regulations.
- A question paper blueprint is used to ensure balanced coverage of all units, COs, and Bloom's Taxonomy levels.
- Each question is explicitly mapped to relevant COs, which are already mapped to POs and PSOs.
- Questions are framed to assess different cognitive levels such as understanding, application, analysis, and problem-solving.

2. Quality Assurance in Question Paper Setting

- The question paper is prepared by experienced internal faculty members, and faculty members from other institutions are also invited to prepare or review the question paper. This ensures objectivity, wider academic perspective, and improved quality.
- All question papers are reviewed and moderated by subject experts to avoid ambiguity, repetition, and errors.
- Proper weightage is given to each unit and Course Outcome (CO) as per the question paper blueprint, ensuring a uniform difficulty level and academic rigor.
- Care is taken to include a balanced mix of theoretical, numerical, and application-oriented questions to assess different levels of student learning and skills.

3. Conduct of SEE

- The Semester End Examination (SEE) is conducted as per the institutional examination guidelines to ensure fairness, transparency, and confidentiality.
- The examination schedule and timetable are prepared and published by the Institution's Examination Cell, ensuring systematic planning and smooth conduct of the examination.
- Standard examination procedures such as seating arrangements, invigilation, and adherence to examination rules are strictly followed to maintain the integrity and credibility of the assessment process.

4. Evaluation of Answer Scripts

- Answer scripts are evaluated using standardized marking schemes and rubrics prepared in advance to ensure clarity and consistency in awarding marks.
- The evaluation focuses on concept clarity, correctness of answers, proper method, and presentation, as clearly defined in the marking scheme.
- Answer scripts are evaluated by both internal faculty members and faculty members from other institutions.
- To ensure objectivity and impartiality, 50% of the evaluators are external faculty members.
- This evaluation process ensures uniform, transparent, and unbiased assessment of all students.

5. CO-wise Performance Analysis

- After evaluation, marks are analysed CO-wise to measure the level of attainment of each Course Outcome.
- CO attainment results are mapped to POs and PSOs to assess overall program effectiveness.

Noorul Islam Centre for Higher Education											
Kumaracoli, Thuckalay, Kanyakumari District											
Department	IT	Academic Year		2024-2025[ODD]							
Class	S3 IT	SUBJECT CODE		IT3205							
Semester	III	SUBJECT NAME		Data Structures							

Final Direct Course Attainment Calculation								Attainment -Int	Attainment -Univ	CO Attainment
Series-1	Series-2	Series-3	Asgn-1	Asgn-2	INT	Univ				
CO1	0		3	3	2	3		0.8	1.8	2.6
CO2	3	3	3	3	3	3		1.2	1.8	3
CO3		3	3	3	3	3		1.2	1.8	3
CO4			3	3	3	3		1.2	1.8	3
CO5			3	3	3	3		1.2	1.8	3
Attainment					2.8	3				
Weightage					40	60				
Direct Total Attainment					1.12	1.8				
Final Direct Course Attainment					2.92					

	PO-A	PO-B	PO-C	PO-D	PO-E	PO-F	PO-G	PO-H	PO-I	PO-J
CO-01	3	3	2	2	3	1	3	1	3	3
CO-02	3	3	2	2	3	1	3	2	3	3
CO-03	3	3	3	3	3	0	3	1	3	3
CO-04	3	3	2	2	3	1	3	1	3	3
CO-05	3	3	2	2	3	1	3	1	3	3
Average Course	3	3	2.2	2.2	3	0.8	3	1.2	3	3
PO Attainment	2.92	2.92	2.1413	2.1413	2.92	0.778667	2.92	1.168	2.92	2.92
Strong - Medium Low 1 Not Relevant 0										
CO-PO Attainment	2.92	2.92	2.9273	2.9273	2.92	2.9	2.92	2.93333333	2.92	2.92

Signature of Staff	Signature of HOD
--------------------	------------------

Fig.3.2.1 Sample Course Attainment

6. Feedback and Continuous Improvement

- The results and CO attainment analysis are reviewed by the department.
- Based on the analysis, corrective actions such as syllabus revision, improved teaching strategies, or additional learning support are planned.

7. Documentation and Course Files

- The following documents are maintained in the course files for quality assurance and accreditation purposes:
 - * SEE question paper with CO mapping
 - * Question paper blueprint
 - * Marking scheme and rubrics
 - * CO attainment and PO/PSO mapping analysis

Thus, the SEE question paper setting and evaluation process ensures a high-quality, outcome-based assessment

End Semester Question paper sample



NAME :

REGISTER NUMBER: 1122212014

BU6022

B. E. / B. Tech. DEGREE EXAMINATIONS, DEC. 2024 / JAN. 2025,
 Seventh Semester
 Information Technology
EC32D2 – WIRELESS COMMUNICATION TECHNIQUES
 (Regulation 2021)

Time: Three hours
Maximum Marks: 100

PART A - (10 x 2 = 20 Marks)

Answer **ALL** questions

Q. No.	Questions	CO	Blooms Level	Marks
1.	What is an ISM band? Why is it called free band?	CO1	L3	2
2.	Differentiate cochannel interference and adjacent channel interference.	CO1	L2	2
3.	What is multiple access? Why is it important?	CO2	L3	2
4.	Differentiate pure-ALOHA and slotted-ALOHA.	CO2	L2	2
5.	Define piconet and scatternet.	CO3	L1	2
6.	How is Zigbee technology different from Bluetooth technology?	CO3	L3	2
7.	What is high speed packet access?	CO4	L1	2
8.	Examine the characteristics defined by IMT-2000 standard.	CO4	L3	2
9.	List the features of 4G system.	CO5	L2	2
10.	What is Multicarrier modulation?	CO5	L1	2
Part B - (5 X 16 = 80 Marks)				
Answer ALL questions choosing either (a) or (b)				
11.	(a) Illustrate handoff strategies in cellular system with neat diagram.	CO1	L4	16
(Or)				
	(b) (i) Explain the channel assignment strategies in cellular system.	CO1	L2	8

		(ii) If a total of 33 MHz of bandwidth is allocated to a particular FDD cellular telephone system which uses two 25 kHz simplex channels to provide full duplex voice and control channels, compute the number of channels available per cell if a system uses (i) 4-cell reuse, (ii) 7-cell reuse, and (iii) 12-cell reuse.	CO1	L3	8
12.	(a)	Illustrate packet radio protocols in wireless communication.	CO2	L4	16
(Or)					
	(b)	Summarize the various multiple access techniques used for wireless communication.	CO2	L5	16
13.	(a)	With neat diagram, explain WiMAX architecture in detail.	CO3	L2	16
(Or)					
	(b)	Draw the protocol architecture of Bluetooth and explain briefly.	CO3	L2	16
14.	(a)	Write a detailed note on 4G. Analyze the architecture of LTE with neat diagram.	CO4	L4	16
(Or)					
	(b)	Describe the architecture of WWAN with neat diagram.	CO4	L2	16
15.	(a)	Analyze the principles of Software Defined Radio with neat diagram.	CO5	L4	16
(Or)					
	(b)	With neat diagram, explain how to detect communication channels using Cognitive Radio.	CO5	L3	16

3.3 Evaluation of Laboratory Work and Workshop (Continuous and SEE) (10)

Total Marks 10.00

The laboratory assessment is evaluated using a structured rubric to ensure fair and consistent grading of students' performance. The assessment comprises five key components: Record, Algorithm, Program, Output, and Viva Voce. In certain laboratory examinations, students are required to perform two programs, and the evaluation is carried out for each program individually as per the same rubric. Each component is evaluated at three performance levels—Excellent, Good, and Poor—based on the student's understanding, execution, and presentation of the experiment. Marks are allotted to each component as specified in the rubric. This evaluation approach effectively measures students' conceptual clarity, practical skills, programming proficiency, and subject knowledge.

Table 3.3.1 Rubrics for Laboratory Assessment

Component	Excellent	Good	Poor
Record	Complete, neat, and properly documented (15)	Minor errors or incomplete documentation (10)	Poorly maintained / not submitted (0)
Program I – Algorithm	Clear, correct, and well-structured (10)	Minor logical issues (7)	Incorrect / unclear (0)
Program I – Program	Error-free and logically correct (15)	Minor syntax / logical errors (10)	Program not working (0)
Program I – Output	Correct output obtained (10)	Partially correct output (5)	Incorrect / no output (0)
Program II – Algorithm	Clear, correct, and well-structured (10)	Minor logical issues (7)	Incorrect / unclear (0)
Program II – Program	Error-free and logically correct (10)	Minor syntax / logical errors (7)	Program not working (0)
Program II – Output	Correct output obtained (10)	Partially correct output (7)	Incorrect / no output (0)
Viva Voce	Answers confidently with strong conceptual clarity (20)	Answers basic questions (15)	Unable to answer satisfactorily (0)

Rubrics for Workshop Assessment

The workshop assessment rubric is designed to evaluate the quality, relevance, and effectiveness of the conducted workshop in a structured and objective manner. The rubric ensures that all essential components of the workshop are assessed systematically and aligned with academic and curriculum requirements. The assessment is divided into four major modules,

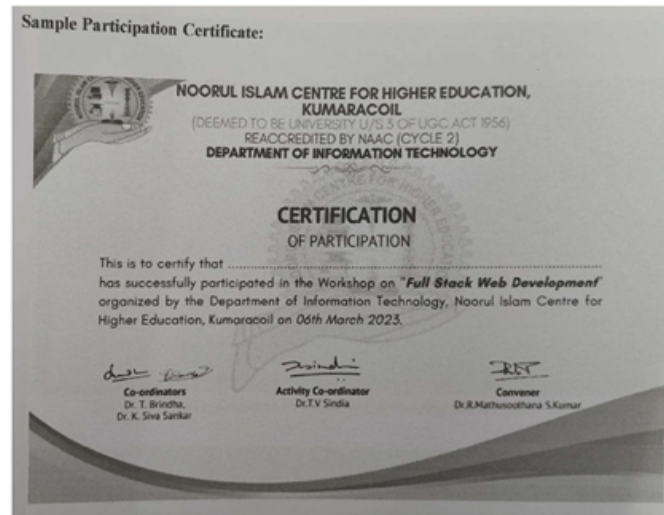
each carrying equal weightage of 25 marks, making a total of 100 marks. The laboratory assessment details are included in the Annexure III.

Table 3.3.2 Rubrics for Workshop Assessment

Module	Assessment Criteria	Excellent	Good	Poor
1	Title of the Workshop	Clearly stated, relevant, and accurate (25)	Title present but lacks clarity or details (15)	Title unclear or missing
2	Alignment with Curriculum	Fully aligned with syllabus and course objectives (25)	Partially aligned with syllabus (20)	Not aligned with syllabus
3	Topics Covered	All topics covered with clarity and adequate depth (25)	Most topics covered adequately (20)	Few topics covered
4	Outcome	Outcomes clearly stated and fully achieved (25)	Outcomes stated but partially achieved (10)	Outcomes unclear or not achieved

The workshop “Full Stack Web Development” is well aligned with the Web Programming course and is relevant to the VI Semester syllabus. It covers essential topics such as HTML, CSS, client-side scripting, server-side scripting, and complete website creation, providing comprehensive exposure to both front-end and back-end development. The learning outcomes are clearly defined, and the workshop enables participants to acquire practical skills in designing and developing dynamic websites, thereby enhancing their technical competence, conceptual understanding, and ability to apply web programming concepts in real-world scenarios.

Sample workshop certificate



3.4 Evaluation of Industrial Training/ Internship (Continuous and SEE) (10)

Total Marks 10.00

The institution has a well-defined and systematic mechanism for the evaluation of Industrial Training / Internship, ensuring that student learning outcomes are continuously monitored and assessed in alignment with the Program Outcomes (POs) and Program Specific Outcomes (PSOs). The evaluation process follows both Continuous Internal Evaluation (CIE) and Semester End Evaluation (SEE), supported by clearly designed rubrics.

POs Attainment: PO7, PO8, PO9, PO10, PO11, PO12

PSOs attainment: PSO2 and PSO3

Table 3.4.1 Evaluation of Industrial Training/Internship

Assessment Parameter	Excellent	Good	Satisfactory	Need improvement
Companies	Tier-1	Tier-2	Tier 3	Other small industries
Attendance	Above 75	60-75	50-60	<50
Duration	For sem 3 - 2 weeks For sem 6 – 4 weeks	For sem 3 - less than 2 weeks For sem 6 - less than 4 weeks	For sem 3- less than 1 week For sem 6- less than 2 weeks	For sem 3- less than 3 days For sem 6-less than 1 week
Relativity	80% related to the domain area	70 percent related to the domain area	60 percent related to the domain area	Less than 50 % related to the domain area
Knowledge obtained	Excellent presentation and knowledge on Viva	Good understanding and presentation.	Average presentation and understanding	Poor presentation and understanding on concepts.
Documentation	Excellent references and clarity.	Good documentation.	Average level of documentation	Poor presentation and clarity on documentation

3.5 Evaluation of Projects (20)

Total Marks 20.00

The evaluation of student projects is carried out using well-defined rubrics to ensure transparent, objective, and outcome-based assessment. The rubrics are designed to assess student learning and to measure the attainment of targeted Program Outcomes (POs) and Program Specific Outcomes (PSOs).

1. Project Evaluation Framework

Projects are evaluated at multiple stages to capture continuous learning and improvement.

Stages of Evaluation:

- Problem identification
- Literature review
- Design Methodology
- Implementation and testing
- Demonstration of working model/prototype
- Project report, presentation, and viva voce

Each stage has specific rubrics aligned with relevant POs and PSOs.

2. Rubrics for Assessment

Our department has framed rubrics to evaluate the students' project. The project is evaluated based on some selected factors. The factors are collection of literature reviews, problem definition, methodology proposed, and etc. A complete rubrics description and the related mark split is given in the following tables. Based on the rubrics stated, the projects are evaluated.

Table 3.5.1 Rubrics for Zeroth Review

Performance Criteria	Excellent (10-8 Marks)	Good (7-5 Marks)	Satisfactory (4-3 Marks)	Poor (2-1 Marks)
Problem Identification (50 %)				
Abstract preparation (50 %)				

Table 3.5.2 Rubrics for Literature Review

Performance Criteria	Excellent (10-8 Marks)	Good (7-5 Marks)	Satisfactory (4-3 Marks)	Poor (2-1 Marks)

Identification of State-of the-art technologies (50 %)				
Literature Review preparation (50 %)				

Table 3.5.3 Rubrics for First Review

Performance Criteria	Excellent (10-8 Marks)	Good (7-5 Marks)	Satisfactory (4-3 Marks)	Poor (2-1 Marks)
Objectives (10 %)				
Literature Review (40 %)				
Methodology of proposed Work (10 %)				
Tools /Algorithms identified (10 %)				
Presentation (20 %)				
Viva Voce (10 %)				

Table 3.5.4 Rubrics for Second Review

Performance Criteria	Excellent (10-8 Marks)	Good (7-5 Marks)	Satisfactory (4-3 Marks)	Poor (2-1 Marks)
Module Description of proposed Work (30%)				

Use of appropriate tools / technologies for coding (10%)				
Work Progress (20%)				
Addressing the needs of Society (10%)				
Presentation (20 %)				
Viva Voce (10 %)				

Table 3.5.5 Rubrics for Final Review

Performance Criteria	Excellent (10-8 Marks)	Good (7-5 Marks)	Satisfactory (4-3 Marks)	Poor (2-1 Marks)
Novelty in the project (10%)				
Implementation of techniques / Execution of work (35%)				
Demonstration/ Quality of results (10%)				
Project Report (15%)				
Conference / Journal publication (10%)				
Viva Voce (20 %)				

Marks are assigned based on the rubric level achieved for each criterion

3. Mapping Rubrics to PO/PSO Attainment

- Each rubric criterion is mapped to specific POs and PSOs.

- Student performance data from rubrics is quantified and aggregated to compute PO/PSO attainment levels.
- Attainment levels are analyzed and discussed in department review meetings.
- Identified gaps are addressed through corrective actions such as curriculum enrichment, additional mentoring, or revised project guidelines.

Table 3.5.6 Mapping Rubrics to PO/PSO Attainment

Assessment Criteria	Description	POs / PSOs Addressed
Problem Identification & Relevance	Ability to identify a real-world/industry/societal problem with clarity and relevance	PO-B, PSO1
Application of Engineering Knowledge	Use of core engineering concepts, theories, and domain knowledge	PO-A, PSO1
Design & Methodology	Design of solution considering constraints such as cost, safety, sustainability, and standards	PO-C, PSO2
Investigation & Analysis	Literature survey, data collection, experimentation, analysis, and interpretation of results	PO-D, PSO2
Modern Tool Usage	Effective use of software tools, programming platforms, simulation and testing tools	PO-B, PSO1
Sustainability & Ethics	Consideration of environmental impact, ethical issues, data privacy, and social responsibility	PO-E,PO-F, PSO3
Implementation & Functionality	Quality of implementation and achievement of stated objectives	PO-H
Innovation & Creativity	Novelty of approach and innovative features in the solution	PO-I
Teamwork & Project Management	Role distribution, collaboration, planning, and time management	PO-G
Communication Skills	Quality of project report, presentation, and response during viva	PO-H
Lifelong Learning	Ability to learn new tools/technologies independently	PO-J

3.6 Evidence of Addressing Sustainable Development Goals (SDG) (10)

Total Marks 10.00

The institution actively integrates the Sustainable Development Goals (SDGs) into teaching–learning processes, student projects, research activities, and co-curricular initiatives. Students are encouraged to identify real-world problems and develop sustainable, ethical, and socially responsible engineering solutions through curricular and extracurricular activities.

1. Student Project Work Aligned with SDGs

Students undertake mini projects and capstone projects addressing sustainability challenges.

Examples of SDG-aligned project themes:

- Energy-efficient systems, green computing, and smart energy management (SDG 7, SDG 13)
- Healthcare monitoring and assistive technologies (SDG 3)
- Smart agriculture, water management, and irrigation systems (SDG 2, SDG 6)
- Waste management, recycling, and pollution monitoring solutions (SDG 11, SDG 12)
- Smart city and intelligent transportation systems (SDG 9, SDG 11)

2. Research and Innovation Activities

- Students participate in research-oriented projects, paper publications, and poster presentations focusing on sustainability and societal impact.
- Faculty-guided student research addresses energy optimization, sustainable technologies, and digital solutions for social good.

3. Activity-Based Learning and Student Initiatives

Students actively engage in SDG-oriented activities such as:

- Hackathons, ideathons, and innovation challenges focusing on climate action, smart solutions, and social welfare
- Awareness programs, seminars, and workshops on environmental sustainability, ethics, and social responsibility
- NSS/extension activities including tree plantation, cleanliness drives, water conservation, and community outreach.

Relevant SDGs addressed:

SDG 3, SDG 4, SDG 11, SDG 12, SDG 13, SDG 15

4. Curriculum Integration and Skill Development

- Sustainability concepts are embedded in core and elective courses through case studies, assignments, and project-based learning.
- Students are encouraged to consider ethical practices, environmental impact, safety, and cost effectiveness in all project work.

3.7 Attainment of Course Outcomes (25)

Total Marks 25.00

3.7.1. Describe the Assessment Tools and Processes Used to Gather the Data for the Evaluation of Course Outcome (5)

Institute Marks : 5.00

The evaluation of Course Outcomes (COs) is carried out using a systematic and well-defined assessment process that includes both direct and indirect assessment tools. These tools are designed to measure the level of attainment of course objectives in alignment with program outcomes.

Direct assessment tools include internal examinations, assignments, laboratory experiments, mini-projects, and end-semester examinations. Internal assessments such as internal exams, and model examinations are conducted periodically to evaluate students' understanding of theoretical concepts. Laboratory assessments and workshop activities are used to assess practical skills, problem-solving ability, and application of concepts. Each assessment component is mapped to specific course outcomes, and rubrics are used to ensure uniform and transparent evaluation.

Indirect assessment tools include course exit surveys, student feedback, and alumni feedback. These tools help in understanding students' perception of their learning and the effectiveness of the teaching-learning process. The feedback collected is analyzed to complement the results obtained from direct assessment methods. The assessment procedure involves setting target attainment levels for each course outcome. Marks obtained by students in various assessment tools are analyzed, and attainment levels are calculated based on predefined criteria. The consolidated attainment results are reviewed by the department, and necessary corrective actions such as curriculum improvement, teaching methodology enhancement, and additional learning support are implemented to improve overall course outcome attainment.

Assessment Parameters:

The performance of a student in each semester shall be evaluated Course-wise with

- 100 marks for theory course
- 100 marks for laboratory course

Theory course:

For Regulation 2021 the distribution shall be

- 25 marks for Internal Examinations
- 75 marks for External End-Examinations

For Regulation 2025 the distribution shall be

- 40 marks for Internal Examinations
- 60 marks for External End-Examinations

Process of conducting internal examinations

For theory courses under Regulation 2021, each semester includes three internal assessments. The first internal examination is conducted after the completion of first one and half units, the second internal examination is conducted after the completion of next one and half units and the third internal examination is conducted after the completion of last two units. Each internal examination is conducted for 50 marks with a duration of 90 minutes, comprising 2-mark questions totaling 18 marks and 16-mark either-or questions totaling 32 marks. All questions are mapped to Course Outcomes (COs) and framed according to Bloom's Taxonomy. For the final internal assessment score out of 25, the best two performances from the three tests are considered for 20 marks, while the remaining 5 marks are awarded based on attendance. Internal exam Question Paper details and internal assessment outcome are listed in Annexure III.

For theory courses under Regulation 2025, each semester comprises three internal assessments. The first internal examination is conducted after the completion of Units I and II, and the second internal examination is conducted after the completion of Units III and IV. Both examinations are held for 50 marks with a duration of 90 minutes each. The third internal assessment is a three-hour model examination covering all five units. The internal examination question paper consists of 6 one-mark questions totaling 6-marks (MCQs, fill-in-the-blanks, or true/false), 8 two-mark questions totaling 16 marks, 2 four-mark questions with either-or pattern totaling 8 marks, and 2 ten-mark questions with either-or pattern totaling 20

marks. The model examination includes 10 one-mark questions, 10 two-mark questions, five four-mark questions with either-or pattern, and five ten-mark questions with either-or pattern. All questions are mapped to Course Outcomes (COs) and framed in accordance with Bloom's Taxonomy.

The marks secured in the three internal examinations are averaged and proportionately scaled down to a maximum of 20 marks. The remaining 20 marks of the internal assessment are allotted as 10 marks for attendance and 10 marks for assignments, making the total internal assessment marks 40.

Process of conducting external examinations:

Each examination shall be conducted for 100 marks with a duration of 180 minutes. For Regulation 2021, the question paper shall include 2-mark questions totaling 20 marks and 16-mark questions with either-or choice totaling 80 marks. Each question in the external examination shall be mapped to specific Course Outcomes (COs) and framed in accordance with Bloom's Taxonomy. Each course shall consist of five units of syllabus, and the student shall answer a total of five questions. External exam Question Paper details and External assessment outcome are listed in Annexure III.

Finally, the CO assessment value is calculated by scaling the marks obtained each student to 75 for regulation 2021.

The Final CO attainment is calculated by combining the Internal attainment and External attainment. For each CO, as per regulations,

- The marks obtained in internal exam questions is scaled to 25.
- The marks obtained in External exams questions is scaled to 75.

The total marks for each CO are calculated in this manner.

Final CO-wise mark = 25% of Internal Exam + 75% of External Exam

For Regulation 2025, each examination shall be conducted for 100 marks with a duration of 180 minutes. The question paper shall include 10 one-mark questions totaling 10 marks in the form of multiple-choice questions, fill-in-the-blanks, or true/false; 10 two-mark questions totaling 20 marks; 5 four-mark questions with either-or choice totaling 20 marks; and 5 ten-mark questions with either-or choice totaling 50 marks. Each question in the external examination shall be mapped to specific Course Outcomes (COs) and framed in accordance with Bloom's Taxonomy.

The CO assessment value is calculated by scaling the marks obtained each student to 60 for regulation 2025.

The Final CO attainment is calculated by combining the Internal attainment and External attainment. For each CO, as per regulations,

- The marks obtained in internal exam questions is scaled to 40.
- The marks obtained in External exams questions is scaled to 60.

The total marks for each CO is calculated in this manner.

Final CO-wise mark = 40% of Internal Exam + 60% of External Exam

2. Laboratory Courses:

(i) Pattern for Internal Lab Examinations: For regulation 2021, continuous internal evaluation shall be carried out during the semester for a total of 25 internal marks. Two internal laboratory examinations shall be conducted in each semester. The syllabus shall be divided equally, with half of the prescribed portion covered in the first internal laboratory examination and the remaining portion covered in the second internal laboratory examination. Of the 25 internal marks, 5 marks shall be awarded for attendance and 20 marks shall be awarded based on performance in the internal laboratory examinations.

For regulation 2025 practical and laboratory courses, the Continuous Internal Assessment (CIA) evaluates students' technical skills, consistency, and understanding of underlying principles. The CIA includes a Midterm Practical Test (50 marks) and a Model Practical Test (100 marks), combined 150 marks are scaled down to 20 marks. Assignments related to laboratory work contribute 10 marks, while attendance accounts for another 10 marks. Thus, the total CIA for practical courses is 40 marks, ensuring continuous assessment of laboratory performance, experimental accuracy, and application of theoretical knowledge.

(ii) Pattern for External Examinations: For practical subjects' exam is to be held for 100 marks. The end examination shall be conducted by the teacher concerned and external examiner from outside the college.

(iii) Overall CO-wise mark: The Final CO attainment is calculated by combining the Internal attainment and External attainment. Then the total mark is scaled to 100.

3.7.2 Record the Attainment of Course Outcomes of all Courses with Respect to Set Attainment Levels (20)

Institute Marks : 20.00

Record of Course Outcome Attainment

The attainment of Course Outcomes (COs) for all courses is systematically recorded with respect to the predefined attainment levels. For each course, target attainment levels are set at the beginning of the academic session based on institutional guidelines and program requirements. These targets define the expected level of student performance for each course outcome. Course Outcome attainment is calculated using data collected from both direct and indirect assessment tools. Direct assessment includes internal tests, assignments, laboratory evaluations, workshops, mini-projects, and end-semester examinations, while indirect assessment comprises course exit surveys and student feedback. The marks obtained are analyzed, and the percentage of students achieving the set performance criteria is determined. The calculated attainment levels for each Course Outcome are documented course-wise and semester-wise. These records are maintained by the department and reviewed periodically to monitor student performance and learning effectiveness. If the attained levels fall below the set targets, corrective measures such as remedial classes, additional tutorials, revision of teaching strategies, and enhancement of learning resources are implemented. The documented attainment records serve as an important input for continuous improvement of the curriculum and teaching-learning process and ensure alignment with program outcomes and institutional quality standards. The target percentage of marks scored by the students is set by the course coordinator after approval by Program Advisory Board at the beginning of the semester.

Table 3.7.2.1 shows the CO attainment for the batch 2021-2025.

Table 3.7.2.1 CO attainment for the batch 2021-2025

PO	Keywords	Target Limit	Attainment Level	Observation	Action to be taken	Course PO Attainment
A	Apply knowledge of maths, science and programming	2	2.79	Good	-	1.45
B	Apply modern tools	2	2.69	Good	-	1.63
C	Develop secure computing systems and infrastructure	2	2.52	Good	-	1.53
D	Assess public, legal and security issues	2	2.42	Good	-	1.4
E	Sustainable development in the field of IT	2	2.32	Good	-	1.38
F	Commit to professional ethics and responsibilities	2	1.86	Good	-	1.12

G	Effectiveness as individuals and member of teams	2	2.46	Good	-	1.55
H	Communicate with Engineering community and society about the field of expertise	2	2.33	Good	-	1.41
I	Manage projects in multidisciplinary environments	2	2.61	Good	-	1.61
J	Life long learning	2	2.75	Good	-	1.64
AVERAGE			2.47			1.47

Course Outcome Attainment details

NICHE		Noorul Islam Centre For Higher Education (Deemed to be University under section 3 of UGC Act 1956) Kumaracoli, Thuckalay, K.K. Dist, Pin-629 180.		Date of publication: 16-05-2025 Month & Year: May - 2025 Course & Branch: B.Tech. Information Technology (with Specialization in Cyber Security and Semester: 8																																																																																																																																																																																																																																																																																																																
TABULATED MARK REGISTER																																																																																																																																																																																																																																																																																																																				
Reg No.	Name	Sex	Subject & Marks												Tot.Cr Cr.Er SGPA CGP																																																																																																																																																																																																																																																																																																					
1121213002	Amith Kingston Elangovan V	M	<table border="1"> <thead> <tr> <th colspan="4">IT32A4</th> <th colspan="4">IT32P5</th> <th colspan="4">IT32A7</th> <th colspan="4">MA3101</th> </tr> <tr> <th>IM</th><th>UM</th><th>Tot</th><th>Gr</th> <th>Res</th><th>IM</th><th>UM</th><th>Tot</th><th>Gr</th> <th>Res</th><th>IM</th><th>UM</th><th>Tot</th><th>Gr</th> <th>Res</th><th>IM</th><th>UM</th><th>Tot</th><th>Gr</th> <th>Res</th> </tr> </thead> <tbody> <tr> <td>17</td><td>45</td><td>62</td><td>C</td> <td>P</td><td>23</td><td>69</td><td>92</td><td>S</td> <td>P</td><td>23</td><td>41</td><td>64</td><td>C</td> <td>P</td><td>14</td><td>38</td><td>52</td><td>E</td> <td>P</td> </tr> </tbody> </table>												IT32A4				IT32P5				IT32A7				MA3101				IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res	17	45	62	C	P	23	69	92	S	P	23	41	64	C	P	14	38	52	E	P	16	16	8.88	6.91																																																																																																																																																																																																																																										
IT32A4				IT32P5				IT32A7				MA3101																																																																																																																																																																																																																																																																																																								
IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res																																																																																																																																																																																																																																																																																																	
17	45	62	C	P	23	69	92	S	P	23	41	64	C	P	14	38	52	E	P																																																																																																																																																																																																																																																																																																	
1121213003	Bright Darwin B A	M	<table border="1"> <thead> <tr> <th colspan="4">IT32B1</th> <th colspan="4">IT32A4</th> <th colspan="4">EC32D2</th> <th colspan="4">IT32A1</th> <th colspan="4">IT32A5</th> <th colspan="4">IT32A7</th> </tr> <tr> <th>IM</th><th>UM</th><th>Tot</th><th>Gr</th> <th>Res</th><th>IM</th><th>UM</th><th>Tot</th><th>Gr</th> <th>Res</th><th>IM</th><th>UM</th><th>Tot</th><th>Gr</th> <th>Res</th><th>IM</th><th>UM</th><th>Tot</th><th>Gr</th> <th>Res</th><th>IM</th><th>UM</th><th>Tot</th><th>Gr</th> <th>Res</th> </tr> </thead> <tbody> <tr> <td>19</td><td>15</td><td>34</td><td>R</td> <td>RA</td><td>16</td><td>34</td><td>50</td><td>E</td> <td>P</td><td>9</td><td>AB</td><td>9</td><td>AB</td> <td>RA</td><td>6</td><td>44</td><td>50</td><td>E</td> <td>P</td><td>16</td><td>20</td><td>36</td><td>R</td> <td>RA</td><td>21</td><td>39</td><td>60</td><td>D</td> <td>P</td> </tr> <tr> <td colspan="4">IT32P5</td> <td colspan="4">IT32A2</td> <td colspan="4">EG3102</td> <td colspan="4">MS3201</td> <td colspan="4">MA3204</td> <td colspan="4">IT3210</td> </tr> <tr> <td>22</td><td>49</td><td>71</td><td>B</td> <td>P</td><td>15</td><td>40</td><td>55</td><td>E</td> <td>P</td><td>8</td><td>16</td><td>24</td><td>R</td> <td>RA</td><td>10</td><td>40</td><td>50</td><td>E</td> <td>P</td><td>12</td><td>4</td><td>16</td><td>R</td> <td>RA</td><td>6</td><td>17</td><td>23</td><td>R</td> <td>RA</td> </tr> <tr> <td colspan="4">IT3214</td> <td colspan="4">IT3202</td> <td colspan="4">BE3101</td> <td colspan="4">IT3207</td> <td colspan="4">IT3203</td> <td colspan="4">IT3216</td> </tr> <tr> <td>9</td><td>41</td><td>50</td><td>E</td> <td>P</td><td>10</td><td>2</td><td>12</td><td>R</td> <td>RA</td><td>15</td><td>10</td><td>25</td><td>R</td> <td>RA</td><td>17</td><td>8</td><td>25</td><td>R</td> <td>RA</td><td>9</td><td>41</td><td>50</td><td>E</td> <td>P</td><td>12</td><td>9</td><td>21</td><td>R</td> <td>RA</td> </tr> <tr> <td colspan="4">IT3208</td> <td colspan="4">IT3204</td> <td colspan="4">IT3213</td> <td colspan="4">IT3205</td> <td colspan="4">EG3101</td> <td colspan="4">MA3101</td> </tr> <tr> <td>9</td><td>41</td><td>50</td><td>E</td> <td>P</td><td>11</td><td>18</td><td>29</td><td>R</td> <td>RA</td><td>8</td><td>0</td><td>8</td><td>R</td> <td>RA</td><td>16</td><td>8</td><td>24</td><td>R</td> <td>RA</td><td>6</td><td>5</td><td>11</td><td>R</td> <td>RA</td><td>9</td><td>0</td><td>9</td><td>R</td> <td>RA</td> </tr> </tbody> </table>												IT32B1				IT32A4				EC32D2				IT32A1				IT32A5				IT32A7				IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res	19	15	34	R	RA	16	34	50	E	P	9	AB	9	AB	RA	6	44	50	E	P	16	20	36	R	RA	21	39	60	D	P	IT32P5				IT32A2				EG3102				MS3201				MA3204				IT3210				22	49	71	B	P	15	40	55	E	P	8	16	24	R	RA	10	40	50	E	P	12	4	16	R	RA	6	17	23	R	RA	IT3214				IT3202				BE3101				IT3207				IT3203				IT3216				9	41	50	E	P	10	2	12	R	RA	15	10	25	R	RA	17	8	25	R	RA	9	41	50	E	P	12	9	21	R	RA	IT3208				IT3204				IT3213				IT3205				EG3101				MA3101				9	41	50	E	P	11	18	29	R	RA	8	0	8	R	RA	16	8	24	R	RA	6	5	11	R	RA	9	0	9	R	RA	16	16	7.06	6.05																																																	
IT32B1				IT32A4				EC32D2				IT32A1				IT32A5				IT32A7																																																																																																																																																																																																																																																																																																
IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res																																																																																																																																																																																																																																																																																												
19	15	34	R	RA	16	34	50	E	P	9	AB	9	AB	RA	6	44	50	E	P	16	20	36	R	RA	21	39	60	D	P																																																																																																																																																																																																																																																																																							
IT32P5				IT32A2				EG3102				MS3201				MA3204				IT3210																																																																																																																																																																																																																																																																																																
22	49	71	B	P	15	40	55	E	P	8	16	24	R	RA	10	40	50	E	P	12	4	16	R	RA	6	17	23	R	RA																																																																																																																																																																																																																																																																																							
IT3214				IT3202				BE3101				IT3207				IT3203				IT3216																																																																																																																																																																																																																																																																																																
9	41	50	E	P	10	2	12	R	RA	15	10	25	R	RA	17	8	25	R	RA	9	41	50	E	P	12	9	21	R	RA																																																																																																																																																																																																																																																																																							
IT3208				IT3204				IT3213				IT3205				EG3101				MA3101																																																																																																																																																																																																																																																																																																
9	41	50	E	P	11	18	29	R	RA	8	0	8	R	RA	16	8	24	R	RA	6	5	11	R	RA	9	0	9	R	RA																																																																																																																																																																																																																																																																																							
1121213004	Gokul R V	M	<table border="1"> <thead> <tr> <th colspan="4">IT32B1</th> <th colspan="4">IT32A4</th> <th colspan="4">IT32P5</th> <th colspan="4">IT32A5</th> <th colspan="4">IT32A7</th> <th colspan="4">IT32A2</th> </tr> <tr> <th>IM</th><th>UM</th><th>Tot</th><th>Gr</th> <th>Res</th><th>IM</th><th>UM</th><th>Tot</th><th>Gr</th> <th>Res</th><th>IM</th><th>UM</th><th>Tot</th><th>Gr</th> <th>Res</th><th>IM</th><th>UM</th><th>Tot</th><th>Gr</th> <th>Res</th><th>IM</th><th>UM</th><th>Tot</th><th>Gr</th> <th>Res</th> </tr> </thead> <tbody> <tr> <td>12</td><td>9</td><td>21</td><td>R</td> <td>RA</td><td>15</td><td>38</td><td>53</td><td>E</td> <td>P</td><td>23</td><td>59</td><td>82</td><td>A</td> <td>P</td><td>7</td><td>11</td><td>18</td><td>R</td> <td>RA</td><td>22</td><td>38</td><td>60</td><td>D</td> <td>P</td><td>14</td><td>43</td><td>57</td><td>D</td> <td>P</td> </tr> <tr> <td colspan="4">BS3102</td> <td colspan="4">AI32D1</td> <td colspan="4">MS3201</td> <td colspan="4">MA3204</td> <td colspan="4">MA3201</td> <td colspan="4">MA3102</td> </tr> <tr> <td>16</td><td>11</td><td>27</td><td>R</td> <td>RA</td><td>9</td><td>26</td><td>35</td><td>R</td> <td>RA</td><td>11</td><td>20</td><td>31</td><td>R</td> <td>RA</td><td>15</td><td>2</td><td>17</td><td>R</td> <td>RA</td><td>15</td><td>0</td><td>15</td><td>R</td> <td>RA</td><td>15</td><td>0</td><td>15</td><td>R</td> <td>RA</td> </tr> <tr> <td colspan="4">IT3214</td> <td colspan="4">IT3210</td> <td colspan="4">IT3202</td> <td colspan="4">IT3206</td> <td colspan="4">IT3203</td> <td colspan="4">IT3216</td> </tr> <tr> <td>10</td><td>40</td><td>50</td><td>E</td> <td>P</td><td>5</td><td>11</td><td>16</td><td>R</td> <td>RA</td><td>12</td><td>5</td><td>17</td><td>R</td> <td>RA</td><td>17</td><td>38</td><td>55</td><td>E</td> <td>P</td><td>10</td><td>40</td><td>50</td><td>E</td> <td>P</td><td>11</td><td>39</td><td>50</td><td>E</td> <td>P</td> </tr> <tr> <td colspan="4">IT3212</td> <td colspan="4">IT3207</td> <td colspan="4">IT3213</td> <td colspan="4">IT3208</td> <td colspan="4">EG3101</td> <td colspan="4">IT3205</td> </tr> <tr> <td>8</td><td>42</td><td>50</td><td>E</td> <td>P</td><td>15</td><td>38</td><td>53</td><td>E</td> <td>P</td><td>10</td><td>40</td><td>50</td><td>E</td> <td>P</td><td>12</td><td>45</td><td>57</td><td>D</td> <td>P</td><td>16</td><td>34</td><td>50</td><td>E</td> <td>P</td><td>14</td><td>9</td><td>23</td><td>R</td> <td>RA</td> </tr> <tr> <td colspan="4">MA3101</td> <td colspan="4"></td> <td colspan="4"></td> <td colspan="4"></td> <td colspan="4"></td> <td colspan="4"></td> </tr> <tr> <td>13</td><td>1</td><td>14</td><td>R</td> <td>RA</td> <td colspan="12"></td> <td colspan="4"></td> <td colspan="4"></td> </tr> </tbody> </table>												IT32B1				IT32A4				IT32P5				IT32A5				IT32A7				IT32A2				IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res	12	9	21	R	RA	15	38	53	E	P	23	59	82	A	P	7	11	18	R	RA	22	38	60	D	P	14	43	57	D	P	BS3102				AI32D1				MS3201				MA3204				MA3201				MA3102				16	11	27	R	RA	9	26	35	R	RA	11	20	31	R	RA	15	2	17	R	RA	15	0	15	R	RA	15	0	15	R	RA	IT3214				IT3210				IT3202				IT3206				IT3203				IT3216				10	40	50	E	P	5	11	16	R	RA	12	5	17	R	RA	17	38	55	E	P	10	40	50	E	P	11	39	50	E	P	IT3212				IT3207				IT3213				IT3208				EG3101				IT3205				8	42	50	E	P	15	38	53	E	P	10	40	50	E	P	12	45	57	D	P	16	34	50	E	P	14	9	23	R	RA	MA3101																								13	1	14	R	RA																					16	16	7.69	6.18
IT32B1				IT32A4				IT32P5				IT32A5				IT32A7				IT32A2																																																																																																																																																																																																																																																																																																
IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res																																																																																																																																																																																																																																																																																												
12	9	21	R	RA	15	38	53	E	P	23	59	82	A	P	7	11	18	R	RA	22	38	60	D	P	14	43	57	D	P																																																																																																																																																																																																																																																																																							
BS3102				AI32D1				MS3201				MA3204				MA3201				MA3102																																																																																																																																																																																																																																																																																																
16	11	27	R	RA	9	26	35	R	RA	11	20	31	R	RA	15	2	17	R	RA	15	0	15	R	RA	15	0	15	R	RA																																																																																																																																																																																																																																																																																							
IT3214				IT3210				IT3202				IT3206				IT3203				IT3216																																																																																																																																																																																																																																																																																																
10	40	50	E	P	5	11	16	R	RA	12	5	17	R	RA	17	38	55	E	P	10	40	50	E	P	11	39	50	E	P																																																																																																																																																																																																																																																																																							
IT3212				IT3207				IT3213				IT3208				EG3101				IT3205																																																																																																																																																																																																																																																																																																
8	42	50	E	P	15	38	53	E	P	10	40	50	E	P	12	45	57	D	P	16	34	50	E	P	14	9	23	R	RA																																																																																																																																																																																																																																																																																							
MA3101																																																																																																																																																																																																																																																																																																																				
13	1	14	R	RA																																																																																																																																																																																																																																																																																																																
1121213005	Jenifer J E	F	<table border="1"> <thead> <tr> <th colspan="4">IT32A4</th> <th colspan="4">IT32A7</th> <th colspan="4">IT32P5</th> </tr> <tr> <th>IM</th><th>UM</th><th>Tot</th><th>Gr</th> <th>Res</th><th>IM</th><th>UM</th><th>Tot</th><th>Gr</th> <th>Res</th><th>IM</th><th>UM</th><th>Tot</th><th>Gr</th> <th>Res</th> </tr> </thead> <tbody> <tr> <td>23</td><td>57</td><td>80</td><td>B</td> <td>P</td><td>24</td><td>56</td><td>80</td><td>B</td> <td>P</td><td>24</td><td>74</td><td>98</td><td>S</td> <td>P</td> </tr> </tbody> </table>												IT32A4				IT32A7				IT32P5				IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res	23	57	80	B	P	24	56	80	B	P	24	74	98	S	P	16	16	9.25	8.44																																																																																																																																																																																																																																																								
IT32A4				IT32A7				IT32P5																																																																																																																																																																																																																																																																																																												
IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res	IM	UM	Tot	Gr	Res																																																																																																																																																																																																																																																																																																						
23	57	80	B	P	24	56	80	B	P	24	74	98	S	P																																																																																																																																																																																																																																																																																																						



NICHE															
Noorul Islam Centre For Higher Education															
Kumaracoli, Thuckalay, K.K.Dist, Pin-629 180															
Course : IF32 Semester : 8															
Result For First Series Test,Second Series Test,Model Test,Attendance Mark,Internal Mark - 13-05-2025															
Reg No.	Name	IT32P5				IT32A4				IT32A7					
		1	2	At.	In.	1	2	3	At.	In.	1	2	3	At.	In.
1121213002	Amith Kingston Elangovan V	97	98	3	22.5	A	75	60	3	16.5	99	98	0	3	22.7
1121213003	Bright Darwin B A	90	85	4	21.5	0	63	58	4	16.1	74	96	0	4	23
1121213004	Gokul R V	96	90	4	22.6	8	51	58	4	14.9	86	96	26	4	22.7
1121213005	Jenifer J E	98	99	4	23.7	91	98	A	4	22.9	99	100	0	4	23.9
1121213006	Jerin Shibu J	97	90	4	22.7	40	90	56	4	18.6	97	96	36	4	23.3
1121213007	Livingston S	90	85	3.5	21	0	63	36	3.5	13.4	78	97	A	3.5	21
1121213008	Navin N	90	85	4	21.5	0	80	87	4	20.7	62	95	0	4	19.7
1121213009	Plasius Roy A	96	90	3.5	22.1	0	70	61	3.5	16.6	88	88	0	3.5	21.1
1121213010	Sajin S S	99	99	4	23.8	98	94	A	4	23.2	99	A	99	4	23.8
1121213011	Shibimon S	99	99	4	23.8	90	98	A	4	22.8	97	99	0	4	23.6
1121213013	Sibin S	98	97	3	22.5	50	70	23	3	15	94	99	A	3	22.3
1121213014	Sree Vardhan M S	98	97	4	23.5	0	86	61	4	18.7	98	99	A	4	23.7
1121213015	Jonliya Jeener M M	98	99	3	22.7	92	90	A	3	21.2	97	97	12	3	22.4
1122313001	Aakaash Mathew B	97	98	3	22.5	52	75	28	3	15.7	92	A	96	3	21.8
1122313003	Akshay R	98	98	3.5	23.1	60	94	A	3.5	18.9	90	97	0	3.5	22.2
1122313004	Jeffrin J	99	99	4.5	24.3	94	98	A	4.5	23.7	96	100	100	4.5	24.5
1122313005	Martin Jino B	97	97	3.5	22.9	87	98	A	3.5	22	99	99	A	3.5	23.3
1122313006	Falzi J	95	90	3.5	22	11	86	60	3.5	18.1	A	95	96	3.5	22.6
1122313007	Mohamed Afsar M	95	90	3	21.5	3	64	A	3	9.7	96	88	A	3	21.4
1122313008	Mohammed Thoufiq A	90	85	3	20.5	0	80	83	3	19.3	A	96	96	3	22.2
Staff Signature															
Sub Code	Subject Name	Staff Name				Signature									
IT32P5	Project Work	Dr.S.Maria Celestin Vigila													
IT32A4	Intrusion Detection and Prevention System	Dr.M.B.Jayalekshmi													
IT32A7	Biometric Image Processing	Dr.Albert Jerome S													


 13.5.25
 Dr. R. Mathu Soothana S. Kumar,
 Head Dept. of Information Technology,
 Noorul Islam Centre for Higher Education,
 Kumaracoli, Thuckalay - 629 180.

3.8 Attainment of Program Outcomes and Program Specific Outcomes (25)

Total Marks 15.00

PO Attainment

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
MA3201	1.52	1.33	0.95	1.52	0.57	0	2.867	1.911	0.95	0.76	PO11	PO12
IT3201	0.71	0.68	0.68	0.71	0.71	0.73	0.62	0.67	0.7	0.7	PO11	PO12
IT3202	0.88	0.88	0.645	0.645	0.645	0.821	0.88	0.88	0.645	0.645	PO11	PO12
IT3203	1.55	1.136	1.24	1.55	1.033	1.033	1.446	1.55	1.55	1.55	PO11	PO12
IT3204	0.293	0.293	0.317	0.342	0.342	0.366	0.344	0.377	0.22	0.268	PO11	PO12
IT3205	2.673	2.673	1.960	1.96	2.673	0.711	2.673	1.069	2.673	2.673	PO11	PO12
IT3271	2.38	2.38	2.38	1.586	2.38	0.634	2.38	1.586	2.38	2.38	PO11	PO12
IT3272	1.3	1.3	1.2	1.3	1.5	1.1	1.5	0.8	1.5	1.5	PO11	PO12
IT3273	2.506	2.172	2.172	2.506	1.671	1.671	2.339	2.506	2.506	2.506	PO11	PO12
MA3204	2.625	2.625	1.75	1.75	2.45	2.45	1.4	1.05	2.625	1.225	PO11	PO12
BS3201	0.88	0.88	0.88	0.88	0.586	0.586	0.88	0.88	0.88	0.88	PO11	PO12
IT3206	2.495	2.138	2.138	2.316	2.316	1.069	1.247	1.960	2.138	2.495	PO11	PO12
IT3207	0.893	0.893	0.893	0.833	0.777	0.893	0.774	0.595	0.893	0.893	PO11	PO12
IT3208	0.539	0.597	0.644	0.566	0.755	0.4	0.377	0.47	0.380	0.503	PO11	PO12
IT3209	0.538	0.483	0.466	0.559	0.512	0.588	0.361	0.381	0.527	0.528	PO11	PO12
IT3274	2.366	2.366	2.051	2.208	2.266	2.051	2.051	1.893	2.366	2.208	PO11	PO12
IT3275	2.44	2.44	2.44	2.44	2.44	1.138	1.626	1.626	2.44	2.44	PO11	PO12
IT3276	1.3	1.3	1.2	1.3	.15	1.1	1.5	0.8	1.5	1.5	PO11	PO12
IT32P1	2.273	2.273	1.970	2.127	1.97	1.97	2.273	2.121	2.121	1.816	PO11	PO12
MS3201	2.773	2.773	2.773	1.848	0.924	0.924	2.773	2.773	2.773	2.773	PO11	PO12
IT3210	0.659	0.565	0.565	0.612	0.621	0.282	0.329	0.518	0.565	0.659	PO11	PO12
IT3211	0.693	0.600	0.60	0.647	0.647	0.508	0.647	0.554	0.647	0.647	PO11	PO12
IT3212	0.542	0.813	0.596	0.542	0.271	0.542	0.813	0.813	0.813	0.813	PO11	PO12
IT3213	1.458	1.25	1.25	1.354	1.354	0.625	0.729	1.115	1.25	1.145	PO11	PO12
IT32B1	2.68	2.68	2.68	1.78	0.893	0.893	2.68	2.68	2.68	2.68	PO11	PO12

IT3277	2.44	2.114	2.114	2.114	2.227	1.952	2.227	2.227	2.227	2.44	PO11	PO12
IT3278	2.46	2.132	2.296	2.46	2.296	2.132	2.132	2.132	2.132	2.132	PO11	PO12
IT3279	3	2.4	2.6	3	2	2	2.8	3	3	3	PO11	PO12
AI32D1	0.640	0.815	0.815	0.873	0.582	0.873	0.698	0.582	0.873	0.873	PO11	PO12
IT3214	0.678	0.581	0.581	0.629	0.629	0.290	0.339	0.532	0.581	0.678	PO11	PO12
IT3215	2.56	2.56	2.56	1.706	2.56	2.56	2.56	1.706	2.56	2.56	PO11	PO12
IT3216	2.758	2.758	2.022	2.022	2.758	0.735	2.758	1.103	2.758	2.758	PO11	PO12
IT32A2	2.773	2.773	2.773	1.848	0.924	0.924	2.773	2.773	2.773	2.773	PO11	PO12
IT32A5	0.726	0.629	0.726	0.726	0.726	0.484	0.726	0.629	0.678	0.678	PO11	PO12
IT3280	1.804	1.804	1.546	1.933	1.288	1.933	1.933	1.933	1.288	1.933	PO11	PO12
IT3281	3	3	3	2.2	3	3	3	2	3	3	PO11	PO12
IT3282	1.5	1.4	1.4	1.3	1.5	1.1	1	1.3	1.5	1.5	PO11	PO12
IT32P2	2.553	2.553	2.212	2.383	2.553	2.212	2.212	2.042	2.553	2.382	PO11	PO12
MS3202	1.884	1.696	2.449	2.942	2.884	2.826	0.94	2.261	1.884	1.696	PO11	PO12
IT3217	0.833	0.833	0.714	0.772	0.595	0.595	0.536	0.714	0.655	0.774	PO11	PO12
IT32A1	0.659	0.565	0.565	0.612	0.612	0.282	0.229	0.518	0.565	0.659	PO11	PO12
IT32A3	0.659	0.565	0.565	0.612	0.621	0.282	0.329	0.518	0.565	0.659	PO11	PO12
EC32D2	2.586	2.586	2.586	1.724	2.586	2.586	2.586	1.724	2.586	2.586	PO11	PO12
IT3283	1.891	1.891	1.621	2.026	1.351	2.026	2.026	2.026	1.351	2.026	PO11	PO12
IT3284	1.671	2.34	2.005	1.838	1.67	1.337	2.172	2.34	2.172	2.172	PO11	PO12
IT32P3	3	3	2	1.6	1	1.64	3	2.6	3	3	PO11	PO12
IT32A7	2.386	2.386	2.386	2.386	1.909	1.750	2.386	2.227	1.591	2.068	PO11	PO12
IT32A4	0.893	0.893	0.595	0.297	0.536	0	0.893	0.774	0.893	0.893	PO11	PO12
IT32P5	3	3	2	1	1.6	1	3	2.6	3	3	PO11	PO12

PO Attainment Indirect

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Graduate Sur	2	3	2	3	3	PO6	PO7	PO8	PO9	PO10	PO11	PO12

Employer Sur	3	2	3	3	2	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Alumni Surve	3	3	3	3	3	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Non CGPA	3	3	3	3	3	PO6	PO7	PO8	PO9	PO10	PO11	PO12

PO Attainment Level

Note: The Institution can fix the weightage of the indirect attainment maximum up to 20%.

Define the Weightage for Indirect Attainment: 20.00

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Direct Attainment	1.74	1.69	1.56	1.49	1.41	1.23	1.61	1.47	1.67	1.68	0	0
InDirect Attainment	2.75	2.75	2.75	3	2.75	0	0	0	0	0	0	0
Overall Attainment	1.94	1.90	1.80	1.79	1.68	0.98	1.29	1.18	1.34	1.34	0	0

PSO Attainment

Course	PSO1	PSO2	PSO3
IT3201	3	3	2

PSO Attainment Indirect

Survey	PSO1	PSO2	PSO3
Graduate	2	3	2

PSO Attainment Level

Course	PSO1	PSO2	PSO3
Direct Attainment	3	3	2
InDirect Attainment	2	3	2
Overall Attainment	2.8	3	2

4 STUDENTS' PERFORMANCE (120)

Total Marks 59.41

Table No. 4A: Admission details for the program excluding those admitted through multiple entry and exit points.

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2025-26 (CAY)	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)	2021-22 (CAYm4)	2020-21 (CAYm5)	2019-20 (CAYm6)
N=Sanctioned intake of the program (as per AICTE /Competent authority)	90	60	30	30	30	30	30
N1=Total no. of students admitted in the 1st year minus the no. of students, who migrated to other programs/ institutions plus no. of students, who migrated to this program	28	30	19	30	14	15	18
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	0	1	1	7	2	0
N3=Separate division if any	0	0	0	0	0	0	0

N4=Total no. of students admitted in the 1st year via all supernumerary quotas	0	0	0	0	0	0	0
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	28	30	20	31	21	17	18

Table No. 4B: Admission details for the program through multiple entry and exit points.

	Item (No. of students admitted/exited through multiple entry and exit points) in the respective batch	2025-26 (CAY)	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)	2021-22 (LYG)	2020-21 (LYGm1)	2019-20 (LYGm2)
N52=No. of students admitted in 2nd year via multiple entry and exit points in same batch	N52=No. of students admitted in 2nd year via multiple entry and exit points in same batch	0	1	0	0	0	0	1
N53=No. of students admitted in 3rd year via multiple entry and exit points in same batch	N53=No. of students admitted in 3rd year via multiple entry and exit points in same batch	0	0	0	0	0	0	0
N54=No. of students admitted in 4th year via multiple entry and exit points in same batch	N54=No. of students admitted in 4th year via multiple entry and exit points in same batch	0	0	0	0	0	0	0
N5=N52+N53+N54	N5=N52+N53+N54	0	1	0	0	0	0	1
N61=No. of students exits after 1st year via multiple entry and exit points in same batch	N61=No. of students exits after 1st year via multiple entry and exit points in same batch	0	0	0	0	0	0	0
N62=No. of students exit after 2nd year via multiple entry and exit points	N62=No. of students exit after 2nd year via multiple entry and exit points	0	0	0	0	0	0	0
N63=No. of students exit after 3rd year via multiple entry and exit points in same batch	N63=No. of students exit after 3rd year via multiple entry and exit points in same batch	0	0	0	0	0	0	0
N6=N61+N62+N63	N6=N61+N62+N63	0	0	0	0	0	0	0

Table No. 4C: No. of students graduated within the stipulated period of the program.

Year of entry	Total no. of students (N1 + N2 + N3+ N4 + N5 - N6 as defined above)	Number of students who have successfully graduated in stipulated period of study) [Total of with Backlog + without Backlog]			
		I year	II year	III year	IV year
2025-26 (CAY)	28				
2024-25 (CAYm1)	31	29			
2023-24 (CAYm2)	20	17	19		
2022-23 (CAYm3)	31	30	30	30	
2021-22 (LYG)	21	14	21	20	19
2020-21 (LYGm1)	17	14	16	15	14
2019-20 (LYGm2)	19	17	18	18	18

4.1 Enrolment Ratio (20)

Total Marks 5.00

Institute Marks : 5.00

Get Details from Table 4.1

Table No.4.1.1: Student enrolment ratio in the 1st year.

Year of entry	N (From Table 4.1)	N1 (From Table 4.1)	N4 (From Table 4.1)	Enrollment Ratio [(N1/N)*100]
2025-26 (CAY)	90	28	0	31.11
2024-25 (CAYm1)	60	30	0	50.00
2023-24 (CAYm2)	30	19	0	63.33

Average [(ER1 + ER2 + ER3) / 3] = 48.15 ≡ 5.00

Assessment : 5.00

4.2 Success Rate of the Students in the Stipulated Period of the Program (15)

Total Marks 7.76

Table No.4.2.1: The success rate in the stipulated period of a program.

Item	(2021-22) LYG	(2020-21) LYGm1	(2019-20) LYGm2
A*= (No. of students admitted in the 1st year of that batch and those actually admitted in the 2nd year via lateral entry, plus the number of students admitted through multiple entry (if any) and separate division if applicable, minus the number of students who exited through multiple entry (if any).	37.00	32.00	30.00
B=No. of students who graduated from the program in the stipulated course duration	19.00	14.00	18.00
Success Rate (SR)= (B/A) * 100	51.35	43.75	60.00

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 51.70

SR Points : 7.76

Note *: If the value of A in Table No. 4.2.1 is less than the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2), then the value of A in Table No. 4.2.1 should be the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2).

4.3 Academic Performance of the First-Year Students of the Program (10)

Total Marks 6.63

Institute Marks : 6.63

Table No.4.3.1: Academic Performance of the First-Year Students of the Program.

Academic Performance	CAYm1(2024-25)	CAYm2(2023-24)	CAYm3 (2022-23)
X=(Mean of 1st year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 1st year/10)	7.29	6.31	7.20
Y=Total no. of successful students	29.00	17.00	30.00
Z=Total no. of students appeared in the examination	30.00	19.00	30.00
API [X*(Y/Z)]	7.05	5.65	7.20

Average API[(AP1+AP2+AP3)/3] : 6.63

Assessment = Average API : 6.63

4.4 Academic Performance of the Second Year Students of the Program (10)

Total Marks 7.55

Table No.4.4.1: Academic Performance of the Second Year Students of the Program.

Academic Performance	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
X=(Mean of 2nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2nd year/10)	7.16	7.07	8.25
Y=Total no. of successful students	19.00	30.00	21.00
Z=Total no. of students appeared in the examination	18.00	31.00	21.00
API [X * (Y/Z)]	7.56	6.84	8.25

Average API [(AP1 + AP2 + AP3)/3] : 7.55

Assessment [AverageAPI] : 7.55

4.5 Academic Performance of the Third Year Students of the Program (10)

Total Marks 7.54

Institute Marks : 7.54

Table No.4.5.1: Academic Performance of the Third Year Students of the Program

Academic Performance	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
X=(Mean of 3rd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 3rd year/10)	7.26	7.82	8.45
Y=Total no. of successful students	30.00	20.00	15.00
Z=Total no. of students appeared in the examination	30.00	21.00	16.00
API [X*(Y/Z)]:	7.26	7.45	7.92

Average API [(AP1 + AP2 + AP3)/3] : 7.54

Assessment [1.5 * AverageAPI] : 7.54

4.6 Placement, Higher Studies and Entrepreneurship (30)

Total Marks 8.93

Table No. 4.6.1: Placement, higher studies, and entrepreneurship details.

Item	LYG (2021-22)	LYGm1(2020-21)	LYGm2(2019-20)
FS*=Total no. of final year students	37.00	32.00	30.00
X=No. of students placed	9.00	8.00	12.00
Y=No. of students admitted to higher studies	0.00	0.00	0.00
Z= No. of students taking up entrepreneurship	0.00	0.00	0.00
Placement Index(P) = $\frac{(X + Y + Z)}{FS} \times 100$:	24.32	25.00	40.00

Average Placement Index = $(P_1 + P_2 + P_3)/3$: 29.77

Placement Index Points: 8.93

4.7 Professional Activities (25)

Total Marks 16.00

4.7.1 Professional Societies/ Bodies, Chapters, Clubs, and Professional Engineering Events Organized (5)

Institute Marks :

Table No. 4.7.1.1: List of active professional societies/bodies/chapters/clubs.

S.No	Name of the Professional Societies/Bodies, Chapters, Clubs
1	Coding club
2	Technology Today and Tomorrow
3	Innovation and Entrepreneurship Club

Table No. 4.7.1.2: List of events/programs organized.**(CAYm1) 2024-25**

S.No	Name of the Professional Societies/Bodies, Chapters, Clubs	Name of the Event	National/International level	Date of Event (DD/MM/YYYY)
1	Professional Event	Seminar On Campus on Boarding	National	19/07/2024
2	Professional Event	Seminar On "Ethical hacking And Cyber Security"	National	16/08/2024
3	Professional Event	Seminar on "Internet of Things"	National	10/09/2024
4	Professional Event	Workshop on "An Insight into Deep learning"	National	25/09/2024
5	Professional Event	Seminar on "AGI: The Next Frontier in Human-AI Collaboration"	National	10/10/2024
6	Professional Event	Natioanl Level Technical Symposium	National	25/10/2024
7	Professional Event	Seminar on "Imapct of Education"	National	11/11/2024
8	Professional Event	PDP on "Transformers in AI: From Data to Dialogue and Personalization"	National	28/11/2024
9	Professional Event	Guest Lecture on Machine Learning And Intelligent Systems	National	23/01/2025
10	Professional Event	Workshop on Cyber Security	National	14/03/2025
11	Professional Event	International Conference on Innovations in Engineering and Technology	International	02/04/2025

(CAYm2) 2023-24

S.No	Name of the Professional Societies/Bodies, Chapters, Clubs	Name of the Event	National/International level	Date of Event (DD/MM/YYYY)
1	Professional Event	PDP on “Application of Artificial Intelligence and Operations Research in Industry”	National	28/05/2024
2	Professional Event	Seminar on Stress Management	National	29/04/2024
3	Professional Event	Workshop on Embedded Intelligence	National	25/04/2024
4	Professional Event	Workshop on “Digital Defenders” – Strengthening Security Awareness	National	22/03/2024
5	Professional Event	Guest lecture on 'Cyber Security'	National	26/10/2023
6	Professional Event	International Conference on Networks, Image and Security	International	23/08/2023

(CAYm3) 2022-23

S.No	Name of the Professional Societies/Bodies, Chapters, Clubs	Name of the Event	National/International level	Date of Event (DD/MM/YYYY)
1	Professional Event	Seminar on “Entrepreneurship Skill, Attitude and Behaviour Development”	National	01/03/2023
2	Professional Event	Workshop on Full Stack Web Development	National	06/03/2023
3	Professional Event	Workshop on Microsoft Azure Fundamentals	National	17/12/2022
4	Professional Event	Workshop on the power of open source technologies	National	19/10/2022

4.7.2 Student's Participations in Professional Events (10)

Institute Marks : 10.00

Table No. 4.7.2.1: List of students participated in professional events.**(CAYm1) 2024-25**

S.No	Name of the Student	Name of the Event	State /State /National/International level	Date of Event (DD/MM/YYYY)	Name of Award
1	Abisheake M	Workshop on "An Insight into Deep learning"	National	25/09/2024	Certificate
2	Anas Mohamed Sali	Workshop on "An Insight into Deep learning"	National	25/09/2024	Certificate
3	J Thakkarai Peer Mohamed	Workshop on "An Insight into Deep learning"	National	25/09/2024	Certificate
4	Mithun Sathya	Guest Lecture on Machine Learning And Intelligent Systems	National	23/01/2025	Certificate
5	Nilofer Mehak	Guest Lecture on Machine Learning And Intelligent Systems	National	23/01/2025	Certificate
6	Nithisa Devi	Guest Lecture on Machine Learning And Intelligent Systems	National	23/01/2025	Certificate
7	Pavithra A	Workshop on Cyber Security	National	14/03/2025	Certificate
8	Sreejith R	Workshop on Cyber Security	National	14/03/2025	Certificate
9	Thaj M S	Workshop on Cyber Security	National	14/03/2025	Certificate

(CAYm2) 2023-24

S.No	Name of the Student	Name of the Event	State /National/International level	Date of Event (DD/MM/YYYY)	Name of Award
1	Andrew Rojan A	Workshop on Embedded Intelligence	National	25/04/2024	Certificate
2	Arockia Andrew E	Workshop on Embedded Intelligence	National	25/04/2024	Certificate
3	Mohamed Shadath M S	Workshop on Embedded Intelligence	National	25/04/2024	Certificate
4	Akash B	Workshop on Embedded Intelligence	National	25/04/2024	Certificate
5	Shanmuga Sundar M	Workshop on "Digital Defenders" – Strengthening Security Awareness	National	22/03/2024	Certificate
6	Ayisha Farzana P	Workshop on "Digital Defenders" – Strengthening Security Awareness	National	22/03/2024	Certificate
7	Vignesh K V	Workshop on "Digital Defenders" – Strengthening Security Awareness	National	22/03/2024	Certificate

(CAYm3) 2022-23

S.No	Name of the Student	Name of the Event	State /National/International level	Date of Event (DD/MM/YYYY)	Name of Award
1	Al Mubeen A	Workshop on Full Stack Web Development	National	06/03/2023	Certificate
2	Anil Kumar A S	Workshop on Full Stack Web Development	National	06/03/2023	Certificate
3	Brodin T K	Workshop on Full Stack Web Development	National	06/03/2023	Certificate
4	Janish Ram J S	Workshop on Microsoft Azure Fundamentals	National	17/12/2022	Certificate
5	Jinjo J	Workshop on Microsoft Azure Fundamentals	National	17/12/2022	Certificate
6	Mohamed Mubeen A	Workshop on Microsoft Azure Fundamentals	National	17/12/2022	Certificate
7	Mohamed Sharukhan A	Workshop on the power of open source technologies	National	19/10/2022	Certificate
8	Mohammed Tharish S	Workshop on the power of open source technologies	National	19/10/2022	Certificate
9	Mohammed Anash M R	Workshop on the power of open source technologies	National	19/10/2022	Certificate
10	Mohideen Pichai A	Workshop on the power of open source technologies	National	19/10/2022	Certificate

4.7.3 Publication of Journals, Magazines, Newsletters, etc. in the Department (5)

Institute Marks : 4.00

Table No. 4.7.3.1: List of students involved in publication of journals, magazines, and newsletters, etc. in the Department.**(CAYm1) 2024-25**

S.No	Name of the Journal, Magazine, Newsletter	Name of the Editor	Name of the Student	Semester	No. of Issues	Hard copy/Soft copy
1	NEP 2020 NICHE NEWS LETTER	Dr.R.Mathusoothana S. Kumar	Anas Mohamed Sali	6	1	Hard copy
2	INTERNATIONAL CONFERENCE ON INNOVATIONS IN ENGINEERING AND TECHNOLOGY Proceedings	Dr.T.Brindha	Sree Varathan	8	1	Hard copy

(CAYm2) 2023-24

S.No	Name of the Journal, Magazine, Newsletter	Name of the Editor	Name of the Student	Semester	No. of Issues	Hard copy/Soft copy
1	International Conference on Networks, Image and Security ICNIS-2023 Proceedings	Dr.Y.Jeyasheela	Subhasree	7	1	Hardcopy

(CAYm3) 2022-23

S.No	Name of the Journal, Magazine, Newsletter	Name of the Editor	Name of the Student	Semester	No. of Issues	Hard copy/Soft copy
1						

4.7.4 Student Publications (5)

Institute Marks : 2.00

Table No. 4.7.4.1: List of student publications.
(CAYm1) 2024-25

S.No	Name of the Student	Semester	Name of the Publisher	Name of the Journal/ Conference, etc.	Volume No.	Issue No.	Name of the Award if any
1							

(CAYm2) 2023-24

S.No	Name of the Student	Semester	Name of the Publisher	Name of the Journal/ Conference, etc.	Volume No.	Issue No.	Name of the Award if any
1	Sreeram N	8	Department of CSE, St.Xaviers Catholic College of Engineering	International Conference on Computational Intelligence and Data Analytics	1	1	Nil
2	Febin W G	8	Department of CSE, St.Xaviers Catholic College of Engineering	International Conference on Computational Intelligence and Data Analytics	1	1	Nil

(CAYm3) 2022-23

S.No	Name of the Student	Semester	Name of the Publisher	Name of the Journal/ Conference, etc.	Volume No.	Issue No.	Name of the Award if any
1							

5 FACULTY INFORMATION (100)

Total Marks 94.00

Sr.No	Name of the Faculty	PAN No.	APAAR faculty ID*(if any)	Highest degree	University	Area of Specialization	Date of Joining in this Institution	Experience in years in current institute	Designation at Time Joining in this Institution	Present Designation	The date on which Designated as Professor/ Associate Professor if any	Nature of Association (Regular/ Contract/ Ad hoc)	Currently Associated (Y/N)	In case of NO, Date of Leaving	IS HOD?
1	A.R.Subramonia Iyer	ACJPR0482L	NA	M.Sc	University of Kerala	Cyber Forensics and Security	23/09/2013	12.2	Professor	Professor	23/09/2013	Regular	Yes		No
2	R.Mathusoothana S. Kumar	AFCPR9573A	NA	M.E. and Ph.D.	Anna University	Image Processing	16/06/1999	26.5	Lecturer	Professor	12/01/2018	Regular	Yes		Yes
3	S. Maria Celestin Vigila	AHTPM1753G	NA	M.E. and Ph.D.	Anna University	Data Security	04/01/1999	26.11	Lecturer	Associate Professor	18/09/2010	Regular	Yes		No
4	K.Siva Sankar	BSYPS5074F	NA	M.E. and Ph.D.	MS University	System Software	01/07/2009	16.5	Lecturer	Associate Professor	01/04/2017	Regular	Yes		No
5	T.Brindha	AVFPB7609G	NA	M.E. and Ph.D.	Noorul Islam Centre for Higher Education	Cloud Security	21/01/2008	17.10	Lecturer	Associate Professor	18/04/2019	Regular	Yes		No
6	Y.Jeyasheela	AIZPJ6679B	NA	M.E. and Ph.D.	Noorul Islam Centre for Higher Education	Data Mining	12/07/2006	19.4	Lecturer	Associate Professor	08/03/2021	Regular	Yes		No
7	M.B. Jayalekshmi	ALPPJ5439A	NA	M.E. and Ph.D.	Noorul Islam Centre for Higher Education	Cloud Security	26/06/2008	17.5	Lecturer	Assistant Professor		Regular	Yes		No
8	T.V.Sindia	BMDPS0158P	NA	M.E. and Ph.D.	Noorul Islam Centre for Higher Education	Cloud Security	01/07/2009	16.5	Lecturer	Assistant Professor		Regular	Yes		No

9	Leena S Watson	AXYPL6173C	NA	M.Tech	APJ Abdul kalam University	Cyber Forensics and Information Security	07/02/2023	2.9	Assistant Professor	Assistant Professor		Regular	Yes		No
10	V.Sujithra	FFFPS2968J	NA	M.E.	Noorul Islam Centre for Higher Education	Cyber Forensics and Information Security	01/09/2025	0.3	Assistant Professor	Assistant Professor		Regular	Yes		No
11	Chithra R	GZIPR3513J	NA	M.Tech	Amrita University	Computational engineering and Networking	26/11/2025	0	Assistant Professor	Assistant Professor		Regular	Yes		No

5.1 Student-Faculty Ratio (SFR) (30)

Total Marks 26.00

No. of UG(Engineering) programs in Department including allied departments/ clusters (UGn):

UG1=1st UG program

UGn=nth UG program

B= No. of Students in UG 2nd year (ST)

C= No. of Students in UG 3rd year (ST)

D= No. of Students in UG 4th year (ST)

No. of PG (Engineering) programs in Department including allied departments/ clusters (PGm):

PG1=1st PG program.

PGm=mth PG program

A= No. of Students in PG 1st year

B= No. of Students in PG 2nd year

Student Faculty Ratio (**SFR**) = S/F

S= No. of students of all programs in the Department including all students of allied departments/clusters.

No. of students (ST)=Sanctioned Intake (SA)+ Actual admitted students via lateral entry including leftover seats (L) if any (limited to 10 % of SA)

Students who admitted under supernumerary quotas (SNQ, EWS, etc) will not be considered in calculating SFR value. Those students are exempted.

F=Total no. of regular or contractual faculty members (Full Time) in the Department, including allied departments/clusters (excluding first year faculty (The faculty members who have a 100% teaching load in the first-year courses)).

UG

No. of UG(Engineering) programs in Department including allied departments/clusters(UGn):

Information Technology						
Year of Study	CAY		CAYm1		CAYm2	
	(2025-26)		(2024-25)		(2023-24)	
	Sanction Intake	Actual admitted through lateral entry students	Sanction Intake	Actual admitted through lateral entry students	Sanction Intake	Actual admitted through lateral entry students
2nd Year	60	1	30	1	30	1
3rd Year	30	1	30	1	30	3
4th Year	30	1	30	3	30	2
Sub-Total	120	3	90	5	90	6
Total	123		95		96	
Grand Total	123		95		96	

PG

No. of PG Programs in the Department

Cyber Security			
Year of Study	CAY(2025-26)	CAYm1(2024-25)	CAYm2 (2023-24)
	Sanction Intake	Sanction Intake	Sanction Intake
1st Year	12	12	12
2nd Year	12	12	12
Total	24	24	24
Grand Total	24	24	24

SFR

No. of UG Programs in the Department1

No. of PG Programs in the Department1

Information TechnologyCyber Security

Description	CAY(2025-26)	CAYm1 (2024-25)	CAYm2 (2023-24)
UG1.B	61	31	31
UG1.C	31	31	33
UG1.D	31	33	32
UG1: Information Technology	123	95	96
PG1.A	12	12	12
PG1.B	12	12	12
PG1: Cyber Security	24	24	24
DS=Total no. of students in all UG and PG programs in the Department	147	119	120
AS=Total no. of students of all UG and PG programs in allied departments	0	0	0
S=Total no. of students in the Department (DS) and allied departments (AS)	S1= 147	S2= 119	S3= 120
DF=Total no. of faculty members in the Department	8	8	8
AF= Total no. of faculty members in the allied Departments	0	0	0
F=Total no. of faculty members in the Department (DF) and allied Departments (AF)	F1= 8	F2= 8	F3= 8
FF=The faculty members in F who have a 100% teaching load in the first-year courses	0	0	0
Student Faculty Ratio (SFR)=S/(F-FF)	SFR1= 18.38	SFR2= 14.88	SFR3= 15.00
Average SFR for 3 years	SFR= 16.09		

Average SFR for three assessment years : 16.09

Assessment SFR : 26

5.2 Faculty Qualification (25)

Total Marks 25.00

Year	X	Y	RF	FQ = 2.5 x [(10X + 4Y) / RF]
2025-26(CAY)	7	1	7.00	26.43
2024-25(CAYm1)	7	1	5.00	37.00
2023-24(CAYm2)	7	1	5.00	37.00

Average Assessment : 33.48

5.3 Faculty Cadre Proportion (25)

Total Marks 25.00

Institute Marks : 25.00

Year	Professors		Associate Professors		Assistant Professors	
	Required F1	Available	Required F2	Available	Required F3	Available
CAY(2025-26)	1.00	1.00	1.00	4.00	4.00	3.00
CAYm1(2024-25)	1.00	1.00	1.00	4.00	3.00	3.00
CAYm2(2023-24)	1.00	1.00	1.00	4.00	4.00	3.00
Average Numbers	1.00	1.00	1.00	4.00	3.67	3.00

Cadre Ratio Marks [(AF1 / RF1) + [(AF2 / RF2) * 0.6] + [(AF3 / RF3) * 0.4]] * 12.5 : 25.00

5.4 Visiting/Adjunct/Emeritus Faculty etc. (10)

Total Marks 8.00

Table No. 5.4.1: List of visiting/adjunct faculty/professor of practice and their teaching and practical loads.**(CAYm1) 2024-25**

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr. Anto Merbin Prakash. J	Project Manager	TATA ELXSI Pvt Ltd, Trivandrum	React in Full Stack Web Development	8.00
2	Prof. Dancy Kurian	Associate Professor	College of Engineering	About Next Generation AI tools	8.00
3	Ms. Aswathy Mohan	Cyber Security Analyst	Securium Solution, Tirunelveli	Ethical Hacking	20.00

(CAYm2) 2023-24

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Dr Sasikumar	Professor	Biomedical Engineering, Human Genetics Department	Evolutionary Models, Reinforcement Learning, Applications	4.00
2	Ms. Aswathy Mohan	Cyber Security Analyst	Securium Solution, Tirunelveli	Privilege Escalation	30.00

(CAYm3) 2022-23

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr. Anto Merbin Prakash. J	Project Manager	TATA ELXSI Pvt Ltd, Trivandrum	MongoDB	8.00
2	Mr.C.Balan	Director	Centre for Development of Advanced Computing (C-DAC)	Cyber Forensics and File Systems	30.00

5.5 Faculty Retention (10)**Total Marks 10.00**

Description	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)
RF=No. of required faculty in the Department including allied Departments to adhere to the 20:1 Student-Faculty ratio, with calculations based on both student numbers and faculty requirements as per section 5.1 of SAR; (RF=S/20).	5	6	6
AF=The no. of available faculty members in the Department including allied Departments	8	8	8
A= The no. of faculty members at the current institute with less than 1 year of experience (A in AF)	0	0	1
B= The no. of faculty members at the current institute with more than 1 year and less than 2 years of experience (B in AF)	0	0	0
C= The no. of faculty members at the current institute with more than 2 years and less than 3 years of experience (C in AF)	1	1	0
D= The no. of faculty members at the current institute with more than 3 years and less than 4 years of experience (D in AF)	0	0	0
E= The no. of faculty members at the current institute with more than 4 years of experience (E in AF)	7	7	7
FR=((((A*0) +(B*1)+(C*2)+(D*3)+(E*4))/RF) *2.50 (points limited to 10)	10	10	10

Average : 10.00

Assessment Marks : 10.00

=====

6 FACULTY CONTRIBUTIONS (120) **Total Marks 65.67**

6.1 Professional Development Activities (60) **Total Marks 42.67**

6.1.1 Memberships in Profession Societies at National/International Levels (5)

Institute Marks : 5.00

Table No. 6.1.1.1: List of faculty members and their memberships.

S.No	Name of the Faculty	Name of the Professional Society /Body at National and International Level	Name of the Grade/ Level/Position
1	Dr. R. Mathusoothana S Kumar	ISTE	Life Member
2	Dr. S. Maria Celestin Vigila	ISTE	Life Member

6.1.2 Faculty as Resource Persons or Participants in STTPs/FDPs (10)

Institute Marks :

6.1.2.1 Faculty as Resource Persons in STTPs/FDPs (5)**Table No. 6.1.2.1: List of faculty members as resource person in STTP/FDP events.****(CAYm1) 2024-25**

S.No	Name of the Faculty as Resource Person	Name of the STTP/FDP	Date (DD/MM/YYYY)	Location	Organized by
1					

(CAYm2) 2023-24

S.No	Name of the Faculty as Resource Person	Name of the STTP/FDP	Date (DD/MM/YYYY)	Location	Organized by
1					

(CAYm3) 2022-23

S.No	Name of the Faculty as Resource Person	Name of the STTP/FDP	Date (DD/MM/YYYY)	Location	Organized by
1					

6.1.2.2 Faculty Members' Participation in STTPs/FDPs (5)

Institute Marks : 3.67

Name of the faculty	Max 5 Per Faculty		
	2024-25(CAYm1)	2023-24(CAYm2)	2022-23(CAYm3)
Dr.R. Mathusoothana.S.Kumar	5.00	5.00	5.00
Dr. S. Maria Celestin Vigila	5.00	0.00	5.00
Dr. T. Brindha	5.00	0.00	0.00
Dr. M.B. Jayalakshmi	5.00	3.00	0.00
Dr. T. V. Sindia	5.00	0.00	0.00
Dr. Y. Jeyasheela	5.00	0.00	0.00
Sum	30.00	8.00	10.00
RDF = Number of faculty required to comply with the 20:1 student - faculty ratio in the Department alone, as per section 5.1 of SAR(RDF= DS / 20).	7.35	5.95	6.00
Assessment Points (AP)= (Sum/(0.5* RDF)) (Points limited to 5 for each assessment year)	5.00	2.69	3.33

Average assessment over 3 years: 3.67

6.1.3 Faculty Contribution in Development of SWAYAM MOOCs and other E-Content (5)

Institute Marks : 5.00

Table No. 6.1.3.1: List of faculty members developed MOOC course for the past 3 years.

S.No	Name of the Faculty	Name of the Course Developed and available online on Swayam platform by your Department faculty
1	Dr. R. Mathusoothana S Kumar	Full Stack Web Development
2	Dr. S. Maria Celestin Vigila	Web Programming
3	Dr. V. Mary Amala Bai	Digital Principles and Design
4	Dr. K. Siva Sankar	Software Engineering Principles
5	Dr.T. Brindha	Computer System Architecture
6	Dr.Y.Jeyasheela	Data Structures using C++
7	Dr.M.B. Jayalekshmi	Intrusion Detection and Prevention System
8	Dr. T.V.Sindia	Database System Concepts
9	Ms. Leena S. Watson	Information System Concepts

6.1.4 Faculty Certification of MOOCs through SWAYAM, etc. (10)

Institute Marks : 10.00

Table No. 6.1.4.1: List of faculty members obtained certification of MOOCs for the past 3 years.

S.No	Name of the Faculty	Name of Course Passed	Course Offered by (agency)	Grade obtained if any
1	Dr. R. Mathusoothana S Kumar	Ethical Hacking	NPTEL	64
2	Dr. S. Maria Celestin Vigila	Ethical Hacking	NPTEL	78
3	Dr. T. Brindha	Cyber Security and Privacy	NPTEL	70
4	Dr. Y. Jeyasheela	Cyber Security and Privacy	NPTEL	75
5	Dr. M.B.Jayalekshmi	Cyber Security and Privacy	NPTEL	82
6	Dr. T.V.Sindia	Cyber Security and Privacy	NPTEL	75
7	Dr. R. Mathusoothana S Kumar	Fundamentals of Artificial Intelligence	NPTEL	70
8	Dr. S. Maria Celestin Vigila	Google Cloud Computing Foundation	NPTEL	78
9	Dr. T. Brindha	Cloud Computing	NPTEL	79
10	Dr. Y. Jeyasheela	Cloud Computing	NPTEL	73
11	Dr. M.B.Jayalekshmi	Cloud Computing	NPTEL	57
12	Dr. T.V.Sindia	Cloud Computing	NPTEL	61

6.1.5 FDP/STTP Organized by the Department (10)

Institute Marks : 3.00

Table No. 6.1.5.1: List of FDPs/STPs organized by Department for the past 3 years.**(CAYm1) 2024-25**

S.No	Name of the Program	Date of the Program(DD/MM/YYYY)	Duration	Name of the Speaker & Designation and Organization	No. of People Attended
1	FDP on Mastering the Technologies shaping Education and Industry	19/05/2025	5 days	Mr. Gershon CTO OpsMonsters Software Consulting Pvt. Ltd.	48

(CAYm2) 2023-24

S.No	Name of the Program	Date of the Program(DD/MM/YYYY)	Duration	Name of the Speaker & Designation and Organization	No. of People Attended
1	Nil	Nil	Nil	Nil	0

(CAYm3) 2022-23

S.No	Name of the Program	Date of the Program(DD/MM/YYYY)	Duration	Name of the Speaker & Designation and Organization	No. of People Attended
1	Nil	Nil	Nil	Nil	0

6.1.6 Faculty Support in Student Innovative Projects (10)

Institute Marks : 10.00

**Table No. 6.1.6.1: List of faculty members involved in student innovative projects.
(CAYm1) 2024-25**

S.No	Name of the Faculty	Name of the Event	Date of the Event(DD/MM/YYYY)	Place of Event	Website Link if any
1	Dr.R.Mathusoothana S. Kumar	International Conference	24/10/2024	St.Xaviers Catholic College of Engineering, Chunkankadai, Nagercoil	-
2	Dr.Y.Jeyasheela	International Conference	03/04/2025	Noorul Islam Centre for Higher Education, Kumaracoil	-

(CAYm2) 2023-24

S.No	Name of the Faculty	Name of the Event	Date of the Event(DD/MM/YYYY)	Place of Event	Website Link if any
1	Dr. R. Mathusoothana S. Kumar	International Conference on Computational Intelligence and Data Analytics	21/03/2024	St.Xaviers Catholic College of Engineering, Chunkankadai, Nagercoil	-
2	Dr. R. Mathusoothana S. Kumar	International Conference on Computational Intelligence and Data Analytics	21/03/2024	St.Xaviers Catholic College of Engineering, Chunkankadai, Nagercoil	-
3	Dr. S. Maria Celestin Vigila	International Conference on Computational Intelligence and Data Analytics	23/03/2024	St.Xaviers Catholic College of Engineering, Chunkankadai, Nagercoil	-

(CAYm3) 2022-23

S.No	Name of the Faculty	Name of the Event	Date of the Event(DD/MM/YYYY)	Place of Event	Website Link if any
1	Realistic Facial Animation and Speech Cloning	International Conference on Networks, Image and Security ICNIS-2023	24/08/2023	Noorul Islam Centre for Higher Education, Kumaracoil	-
2	Dr. S. Maria Celestin Vigila	International Conference on Networks, Image and Security ICNIS-2023	24/08/2023	Noorul Islam Centre for Higher Education, Kumaracoil	-

6.1.7 Faculty Internship/Training/Collaboration with Industry (10)

Institute Marks : 6.00

Table No. 6.1.7.1: Faculty internship/training/collaboration details.

S.No	Name of the Faculty	Name of the Internship/ Training/ Collaboration	Name of the Company & Place	Duration	Outcomes of Internship/ Training/ Collaboration
1	Dr.S.Maria Celestin Vigila	Tensor Flow for Machine Learning	ICT Academy, Nagercoil	5 days	Faculty gaining skills in modern pedagogy, Technology integration
2	Dr.R.Mathusoothana.S.Kumar	OBE and application of Generative AI in Teaching and Research	The Commissionerate of Collegiate Education, Andhra Pradesh	10 days	Enhancing teaching quality, leading to improved student performance and academic excellence
3	Dr.T.Brindha	Basics of Machine Learning and Deep Learning	Chase Technologies, Chennai	5 days	Gain new knowledge and skills
4	Dr.M.B.Jayalekshmi	Microsoft Power BI Data Analyst Associate	ICT Academy	5 days	Enhanced teaching skills, improved research capabilities, better career advancement opportunities
5	Dr.R.Mathusoothana S. Kumar	Palo Alto Cloud Security Fundamentals	ICT Academy	5 days	Enhanced teaching skills, improved research capabilities, better career advancement opportunities
6	Dr.S.Maria Celestin Vigila	Cloud Practitioner	ICT Academy	5 days	Faculty gaining skills in modern pedagogy, Technology integration
7	Dr.R.Mathusoothana S. Kumar	Cloud Practitioner	ICT Academy	5 days	Enhanced teaching skills, improved research capabilities, better career advancement opportunities

6.2 Research and Development Activities (60)**Total Marks 23.00**

6.2.1 Academic Research (10)

Institute Marks : 10.00

Table No. 6.2.1.1: Faculty publication details.

S.No.	Item	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)
1	No. of peer reviewed journal papers published	13	21	16
2	No. of peer reviewed conference papers published	40	32	4
3	No. of books/book chapters published	1	2	1

6.2.2 Ph.D. Student Details (5)

Institute Marks : 3.00

Table No. 6.2.2.1: Ph.D. details.

S.No.	Item	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)
1	No. of students enrolled for Ph.D. in the Department	1	1	1
2	No. of Ph.D. students graduated in the Department	1	1	0

6.2.3 Development Activities (10)

Institute Marks : 10.00

The details of patents granted / published by faculty members are presented in the following tables.

Table 6.2.3.1 Patents in 2024-2025

Sl. No	Name of the Faculty	Application Number	Title	Status	Year of Publication
1	R.Mathusoothan a S Kumar	202441066485	Hybrid Network Intrusion Detection Framework Using CNN-Based Ensemble Classifier with Wireshark and Honeypot	Published	13 th September 2024
2	R.Mathusoothan a S Kumar	202441072602	Optimizing Cyber Defense by Integrating Snort with Darktrace for Enhanced Threat Analysis	Published	4 th October 2024
3	T. Brindha	6369348	Smart Luminescent Multifunctional Headwear	Published	10 th June 2024
4	T. Brindha	202541004625 A	Scalable Blockchain Integration For Decentralized Cloud Computing Security	Published	31 st January 2025
5	R.Mathusoothan a S Kumar	462685-001	AI Based Smart Seed Sowing Robot	Filed	18 th June 2025

Table 6.2.3.2 Patents in 2023-2024

Sl. No	Name of the Faculty	Application Number	Title	Status	Year of Publication
--------	---------------------	--------------------	-------	--------	---------------------

1	Dr.R.Mathusoothan a S. Kumar	2023410467 36	Robust Multi-View Video face recognition based on particle filter with immune genetic algorithm	Published	01.09.2023
2	Dr.T.V. Sindia	2024410044 76	A Cutting-Edge New Method for Digital Marketing with AI, Blockchain and IOT	Published	February 2024
3	Dr.R.Mathusoothan a S. Kumar	407480-001	ML Based Breast Cancer Monitoring Device	Granted	09.04.2024

6.2.4 Sponsored Research Project (15)

Institute Marks :

2024-25 (CAYm1)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25

2023-24 (CAYm2)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25

2022-23 (CAYm3)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25

Total Amount (Lacs) Received for the Past 3 Years:

Note*:

- Only sponsored research projects will be considered. Infrastructure-based projects will not be considered here.

6.2.5 Consultancy Work (15)

Institute Marks : 0

2024-25 (CAYm1)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25

2023-24 (CAYm2)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25

2022-23 (CAYm3)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr. R. Mathusoothana S. Kumar	Dr. S. Maria Celestin Vigila	Information Technology	Website Revamping	Rubix Crew Pvt. Ltd.	3 months	0.05
						Amount received (Rs.):0.05

Total amount (Lacs) received for the past 3 years: 0.05

Note*:

- Only consultancy projects will be considered. Infrastructure-based projects will not be considered here.

6.2.6 Institution Seed Money or Internal Research Grant to its Faculty for Research Work(5)**6.2.6 A Amount received (3)**

Institute Marks :

2024-25 (CAYm1)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project

2023-24 (CAYm2)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project

2022-23 (CAYm3)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project

Total amount (Lacs) received for the past 3 years :

6.2.6 B Amount utilized (2)

Institute Marks :

7 FACILITIES AND TECHNICAL SUPPORT (100)

Total Marks 90.00

7.1 Adequate and well equipped laboratories, and technical manpower (40)

Total Marks 40.00

Sr. No	Name of the Laboratory	Number of students per set up(Batch Size)	Name of the Important Equipment	Weekly utilization status(all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the Technical staff	Designation	Qualification
1	Advanced Artif	30	Computer (i7,	IT3278-Object	Ms.Sajitha C	Lab Assistant	B.E.
2	Advanced Artif	30	Computer (i7,	IT3273-Object	Ms.Sajitha C	Lab Assistant	B.E.
3	Advanced Artif	30	Computer (i7,	IT3271-Data St	Ms.Sajitha C	Lab Assistant	B.E.
4	Advanced Artif	30	Computer (i7,	IT3284- Cloud	Ms.Sajitha C	Lab Assistant	B.E.
5	Advanced Artif	30	Computer (i7,	CF3680-Datab	Ms.Sajitha C	Lab Assistant	B.E.
6	Advanced Artif	30	Computer (i7,	IT32P3- Projec	Ms.Sajitha C	Lab Assistant	B.E.
7	Advanced Artif	30	Computer (i7,	IT3282- Full St:	Ms.Sajitha C	Lab Assistant	B.E.
8	Advanced Artif	30	Computer (i7,	CF3678 - Web	Ms.Sajitha C	Lab Assistant	B.E
9	Advanced Artif	30	Computer (i7,	IT3274- Data C	Ms.Sajitha C	Lab Assistant	B.E
10	Advanced Artif	30	Computer (i7,	IT3281- Web P	Ms.Sajitha C	Lab Assistant	B.E
11	Advanced Artif	30	Computer (i7,	IT32P5 - Projec	Ms.Sajitha C	Lab Assistant	B.E
12	System Progra	30	Computer (i7,	IT3279-Java Pi	Mr.Akbar M	Lab Assistant	B.E.,M.E., M.Si
13	System Progra	30	Computer (i7,	CF4676- Java	Mr.Akbar M	Lab Assistant	B.E.,M.E., M.Si
14	System Progra	30	Computer (i7,	CF5672-Objec	Mr.Akbar M	Lab Assistant	B.E.,M.E., M.Si
15	System Progra	30	Computer (i7,	CF5671- Comp	Mr.Akbar M	Lab Assistant	B.E.,M.E., M.Si
16	System Progra	30	Computer (i7,	CY5501- Mini I	Mr.Akbar M	Lab Assistant	B.E.,M.E., M.Si
17	System Progra	30	Computer (i7,	IT3275- Datab	Mr.Akbar M	Lab Assistant	B.E.,M.E., M.Si
18	System Progra	30	Computer (i7,	CY4572- Data	Mr.Akbar M	Lab Assistant	B.E.,M.E., M.Si
19	System Progra	30	Computer (i7,	CF4674- Pythc	Mr.Akbar M	Lab Assistant	B.E.,M.E., M.Si
20	System Progra	30	Computer (i7,	CF4673- Oper	Mr.Akbar M	Lab Assistant	B.E.,M.E., M.Si
21	System Progra	30	Computer (i7,	IT3276- Operat	Mr.Akbar M	Lab Assistant	B.E.,M.E., M.Si
22	Cyber Forensic	30	Computer (i7,	IT3283-Cyber I	Ms.Sajitha C	Lab Assistant	B.E.
23	Cyber Forensic	30	Computer (i7,	CF4675- Cybe	Ms.Sajitha C	Lab Assistant	B.E.
24	Cyber Forensic	30	Computer (i7,	CF3679- Ethic	Ms.Sajitha C	Lab Assistant	B.E.

25	Cyber Forensic	30	Computer (i7,	CF4573-Cyber	Ms.Sajitha C	Lab Assistant	B.E.
26	Cyber Forensic	30	Computer (i7,	IT3280 - Cyber	Ms.Sajitha C	Lab Assistant	B.E.
27	Cyber Forensic	30	Computer (i7,	CF3677- Comç	Ms.Sajitha C	Lab Assistant	B.E.
28	Cyber Forensic	30	Computer (i7,	IT32P5 - Projec	Ms.Sajitha C	Lab Assistant	B.E.

7.2 Additional Facilities Created for Improving the Quality of Learning Experience in Laboratories (20)

Total Marks 20.00

Institute Marks : 20.00

Sr. No	Name of the Facility	Details	Purpose for creating facility	Utilization	Relevance to POs/PSOs
1	FIGMA	Open source	Figma is a cloud-based design platform for creating, prototyping, and collaborating on user interfaces (UI) for websites, apps, and digital products	2023-2024	PO-B, PO-E, PO-G, PO-I,PO-J
2	JIRA	Open source	Jira is a powerful project management and issue-tracking tool used across many industries, primarily by software teams to plan, track, and release projects, but also by IT, marketing, and business teams for bug tracking, agile development (Scrum, Kanban), service management, and streamlining workflows, offering a central platform for tasks, progress, and team collaboration.	2023-2024	PO-B, PO-E, PO-G, PO-I,PO-J
3	KALI LINUX	Version 3	Kali Linux is an operating system designed for penetration testing and security auditing that includes tools like the Social Engineering Toolkit (SET), sqlmap, and Wireshark. These tools can be used for both ethical security assessments and malicious attacks.	2024-2025	PO-B, PO-E, PO-G, PO-I,PO-J
4	Machine Learning	Python	Machine Learning (ML) in Python is the process of building models that learn patterns from data and make predictions or decisions without being explicitly programmed. Python is widely used for ML because it is simple, flexible, and has powerful libraries.	2024-2025	PO-B, PO-E, PO-G, PO-I,PO-J

7.3 Maintenance of laboratories and overall ambiance (10)

Total Marks 10.00

The department follows a systematic and well-defined maintenance procedure to ensure the smooth functioning of all laboratories and to maintain a healthy academic ambiance.

Whenever a computer system or peripheral develops a fault, the concerned lab in-charge immediately submits a fault report to the Internet Laboratory / Technical Support Section. The technical team inspects the system, identifies the damaged or malfunctioning components, and carries out the necessary repair or replacement activities. After completing the repair work, a rectification report is submitted, confirming that the system is restored to proper working condition. In cases where any component is found to be irreparable, the damaged item is replaced with a new one following institutional procedures.

To ensure uninterrupted power supply and protect equipment from voltage fluctuations, UPS are maintained and it can be periodically inspect and service once in every six months. Preventive maintenance such as cleaning of systems, checking cables, updating software, and antivirus scanning is carried out regularly to avoid unexpected failures.

The overall ambiance of the laboratories is maintained with proper lighting, ventilation, air circulation, and adequate seating arrangements. Cleanliness and hygiene are strictly followed, and laboratories are organized to provide a safe and comfortable learning environment. Display boards, safety instructions, and proper labeling of systems further enhance usability and discipline. These practices ensure that the laboratories remain well-maintained, student-friendly, and conducive to effective teaching and learning.

Photos related to laboratory maintenance

Computer Fault Report

NOORUL ISLAM CENTRE FOR HIGHER EDUCATION, Kumaracoli

Computer Fault Report

Date: 24/02/25

Name of the Lab and Department: Advanced Artificial Intelligence Lab

SLNo	System code	Problem of the Equipments	Status
1.	ITA1025	cpu	Not working
2.	ITA1033	cpu	Not working
3.	ITA1005	Keyboard, cpu	Not working
4.	ITA1031	cpu	Not working
5.	ITA1015	cpu	Not working
6.	ITA1004	cpu	Not working
7.	ITA1005	cpu	Not working

Signature: [Signature]
 Date: 24/02/25
 Name and Signature of the Lab Assistant

Signature: [Signature]
 Date: 24/02/25
 Name and Signature of the Lab-in-Charge,
 M.B. Jayakrishna

Signature of the HOD

Signature: [Signature]
 Date: 24/02/25
 Dr. R. Mathu Soothana S. Ku
 Head Dept. of Information Technology
 Noorul Islam Centre for Higher Education
 Kumaracoli, Thuckalay - 629 11

(To be filled by System Maintenance Department)

Received on :

Received by :

Complaint number allotted: 55764


NOORUL ISLAM CENTRE FOR HIGHER EDUCATION

Kumarecolli - 629 180, Kanyakumari District, Tamil Nadu, India
 www.niuniv.com info@niuniv.com
 +91-9486856101, 04651-250566

Computer Fault Rectification Report

Compliant No: SS764

Date: 8/05/25

Name of the Lab and Department: Advanced Artificial Intelligence Lab

Sl.No	System Code	Problem Identified	Rectified / No Rectified
1.	ITA1025	500GB Mr.2 NVMe	Not Rectified
2.	ITA1033	500GB Mr.2 NVMe	Not Rectified
3.	ITA1002	500GB Mr.2 NVMe 8MP5, H610 MB	Not Rectified
4.	ITA1031	500GB Mr.2 NVMe	Not Rectified
5.	ITA1015	500GB Mr.2	Not Rectified
6.	ITA1004	500GB Mr.2	Not Rectified

[Signature]
 Name and Signature of the Lab Assistant

[Signature]
 Name and Signature of the Rectifying person

[Signature]
 Name and Signature of the Lab-in-Charge

[Signature]
 Dr. R. Mathias S. Kumar,
 Head Dept. of Information Technology,
 Noorul Islam Centre for Higher Education,
 Kumarecolli, Thuckalay - 629 180.



NOORUL ISLAM CENTRE FOR HIGHER EDUCATION
Kumaracoli - 629 180, Kanyakumari District, Tamil Nadu, India
www.nicnic.com info@nicnic.com
+91-9486856101, 04651-250566

Date: 18/09/2025

Warranty Replacement Items

IT LAB

Sl No	Fault Items	Qty	Replaced items	Status
1	Gigabyte Nvme SSD 500GB	12	Gigabyte Nvme SSD 500GB	Installed Successfully
2	Gigabyte H610 Motherboard	2	Gigabyte H610 Motherboard	Installed Successfully
3	Blackbox-500 SMPS	1	Blackbox-500 SMPS	Installed Successfully

[Signature] [Sajitha C]
Name & Signature of the Lab Assistant

[Signature] Selvan S, Vasanth S
Name & Signature of the Installed Person

[Signature] V. Manoj Abraham
Name & Signature of the Lab In-charge

[Signature] 25.09.25
Name & Signature of the HOD
Dr. R. Mathu Soothana S. Kumar,
Head Dept. of Information Technology,
Noorul Islam Centre for Higher Education,
Kumaracoli, Thuckalay - 629 180.

IT A1025, 038, 002, 081, 015, 004 Systems are
Rectified.

NOORUL ISLAM CENTRE FOR HIGHER EDUCATION
NOORUL ISLAM UNIVERSITY
KUMARACOIL
Computer Lab Equipment Service Report

Department Name: Information Technology

Lab Name : Computer Lab

Date of Service	Name & Address of Service Person	Equipment Number	Problem & Status	Signature of the Lab in charge
05/04/23	R. Russell Ray Perfect Power Supply Mortlandam	12.5 KUN UPS	1. 12.5 - 2000Watt Date DC Driver Board Replaced A.C. capacitor UPS etc.	Jay 5/4/23 R.R.
21/07/23	R. Russell Ray Perfect Power System	12.5 KUN UPS	6 EL 40 EX 100 Badley 1	Jay 21/7/23 R.R.
29/11/2024	R. Russell Ray Perfect Power System.	UPS → Batteries Maintenance		Jay 29/11/24 R.R.
29/01/2025	R. Russell Ray Perfect power System	UPS → Batteries Maintenance		Jay 29/1/25 R.R.

7.4 Safety measures in laboratories (10)

Total Marks 10.00

Sr. No	Laboratory Name	Safety Measures
1	Advanced Artificial Intelligence Lab	First-aid box
2	System Programming Lab	Fire extinguisher
3	Cyber Forensics Lab	Fire extinguisher

7.5 Project laboratory/research laboratory /centre of excellence (20)**Total Marks 10.00**

S.No.	Name of the Laboratory
1	System Programming Laboratory (MAT LAB)

The System Programming Laboratory (MATLAB) is established to support student projects, research activities, and advanced practical learning in the department. The laboratory is equipped with computer systems installed with MATLAB software, which is extensively used for system-level programming, data analysis, algorithm development, simulation, and research-oriented experimentation.

Smart Room and Laboratory usage photographs

Smart Classroom with ICT Facility



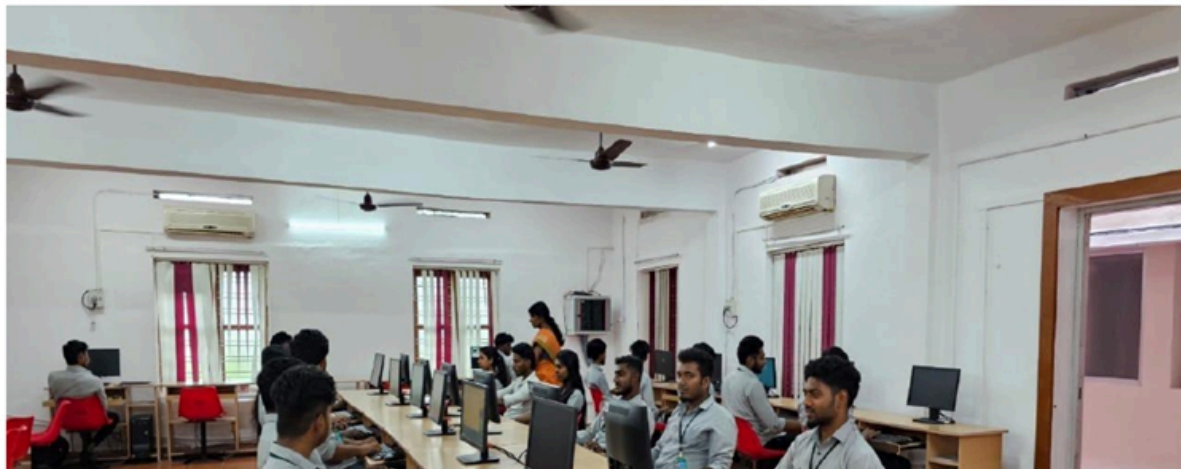
Advanced Artificial Intelligence Lab



System Programming Lab



Cyber Forensics Lab





8 CONTINUOUS IMPROVEMENT (80)

Total Marks 80.00

8.1 Actions taken based on the results of evaluation of each of the COs, POs & PSOs (40)

Total Marks 40.00

8.1.1 Actions Taken Based on the Results of Evaluation of the COs Attainment (20)

Institute Marks : 20.00

Actions Taken Based on Evaluation of COs Attainment:**1. Identification of Weak Areas:**

- Analysis of CO attainment levels for the assessment year revealed that students showed lower performance in certain program outcomes, particularly in advanced concepts, application-oriented courses, and elective modules.
- Specific gaps were observed in practical application, problem-solving skills, and understanding of theoretical concepts in courses such as Engineering Mathematics, Data Structures, Full Stack Web Development, Principles of Communication, Machine learning.

2. Measures Implemented:**a) Curriculum Intervention:**

- Updated course content to include more real-world examples, case studies, and practical exercises.
- Coaching classes for the slow learners were conducted in order to make them understand the concepts.
- More writing practice were given on important topics. The assignments related to description were also given.
- Introduced bridge modules and supplementary tutorials for topics where students showed consistent weaknesses.
- Increased weightage of project-based learning and lab sessions to reinforce applied understanding.

b) Pedagogical Initiatives:

- Conducted problem-solving workshops.
- Conducted faculty training sessions to improve teaching methodologies and assessment strategies.
- Integrated online learning resources and simulation tools to strengthen concept clarity.

c) Support System Improvements:

- Introduced remedial classes and mentoring programs.
- Enhanced student access to digital learning platforms, question banks, and recorded lectures.
- Provided feedback mechanisms for students to identify learning challenges early and take corrective action.

3. Monitoring and Follow-Up:

- Continuous monitoring of CO attainment in subsequent assessments to measure the effectiveness of interventions.
- Periodic review meetings with faculty to evaluate the impact of curriculum changes and teaching strategies.
- Adjustments made to ensure sustained improvement in weak areas and overall CO attainment.

Outcome:

The interventions led to measurable improvement in CO attainment levels in critical courses, enhanced student engagement, and better alignment of learning outcomes with program objectives.

8.1.2 Actions Taken Based on the Results of Evaluation of the POs/PSOs Attainment (20)

Institute Marks : 20.00

The evaluation of Programme Outcomes (POs) and Programme Specific Outcomes (PSOs) attainment levels is carried out systematically using both direct and indirect assessment tools. Direct assessment tools are methods that evaluate student learning by examining actual student performance and work. Examples of direct assessment tools include series tests, end semester examinations, assignments, laboratory assessments, projects, internships, and seminars. Indirect assessment tools assess student learning based on perceptions, opinions, and feedback rather than direct evidence of performance. These tools capture stakeholders' views on how well learning outcomes have been achieved. Examples of indirect assessment tools include student feedback, alumni surveys, employer feedback and faculty feedback.

Based on the analysis of attainment data for the last two academic years, specific areas of weakness were identified, and targeted corrective measures were implemented through curriculum interventions, pedagogical initiatives, and support system improvements to enhance overall PO/PSO attainment.

Identified Areas of Weakness

The PO/PSO attainment analysis indicated relatively lower attainment levels in the following areas:

- PO-B and PO-C: Moderate gaps in problem analysis and system design skills, particularly in core technical courses.
- PO-G: Limited exposure to teamwork and collaborative problem-solving.
- PO-H and PO-I: Need for enhanced awareness of professional ethics, lifelong learning, and societal responsibilities.
- PSO-related skills: Insufficient hands-on exposure to industry-relevant tools and real-time applications.

Measures Implemented to Improve PO/PSO Attainment

Curriculum Interventions

- Introduced case studies, real-time applications, and mini-projects in core and elective courses to strengthen analytical and design-oriented POs.
- Revised laboratory experiments and project components to include industry-aligned tools and technologies.
- Encouraged interdisciplinary and application-based assignments to improve system-level thinking and innovation.

Pedagogical Initiatives

- Adopted active learning strategies such as problem-based learning.
- Implemented case study-based teaching, including real-world software and system design problems, to improve PO-B and PO-C attainment.
- Promoted self-learning through NPTEL courses, enabling students to acquire advanced and emerging technical skills aligned with POs

Support System Improvements

- Conducted remedial classes and mentoring sessions for students with lower attainment levels.
- Organized workshops, technical seminars, and guest lectures by industry experts to enhance professional skills and ethical awareness.
- Strengthened student counselling and academic mentoring to support slow learners and improve overall performance.

Monitoring and Continuous Improvement

- PO/PSO attainment levels are reviewed periodically in Department Advisory Board (DAB), BOS, and IQAC meetings.
- Feedback from stakeholders such as students, alumni, employers, and faculty is incorporated into the improvement process.
- Comparative analysis of PO/PSO attainment data over two years shows progressive improvement due to the implemented measures.

8.2 Academic Audit and actions taken thereof during the period of Assessment (15)

Total Marks 15.00

During the period of assessment, academic audits were systematically conducted to ensure the effective implementation of the curriculum, maintenance of academic standards, and continuous improvement in teaching–learning processes. The audit process involved the review of lesson plans, course outcomes, attainment levels, internal assessment methods, laboratory records, and student performance.

The audit committee evaluated the alignment of course objectives with program outcomes, adequacy of teaching methodologies, use of ICT tools, and adherence to the academic calendar. Feedback was collected from students and faculty to identify strengths and areas for improvement.

Based on the observations and recommendations of the academic audit, appropriate corrective measures were implemented. Faculty members were advised to adopt innovative teaching methods, incorporate activity-based learning, and enhance the use of digital resources. Remedial classes and mentoring sessions were organized for slow learners, while advanced learners were encouraged to participate in value-added courses, workshops, and project-based learning.

Periodic assessments were strengthened, laboratory experiments were updated where required, and evaluation practices were standardized. Continuous monitoring ensured that the suggested actions were effectively implemented, leading to improved academic performance and overall quality enhancement.

The academic audit process thus contributed significantly to maintaining academic excellence and fostering a culture of continuous improvement.

Sample Academic Audit

NOORUL ISLAM CENTRE FOR HIGHER EDUCATION, KUMARACOIL

(Declared as Deemed-to-be-University under section 3 of the UGC Act 1956)

ACADEMIC ASSESSMENT AUDIT

Name of the Department: *Information Technology* (2021 – 2022) Date: *23/11/23*

SLNo	Description	Five Point Scale				
		A	B	C	D	E
I	CURRICULAR ASPECTS					
1	Lecture Plan	/				
2	Lab Plan	/				
3	Incorporation of BOS Meetings Recommendations	/				
4	New Electives Introduced	/				
5	Class Committee	/				
6	Programme Committee	/				
7	Academic - Course Registration	/				
8	Intramural - Course Registration	/				
9	Extension Activities					/
10	Lab Manual	/				
	$45 + 0 + 0 + 0 + 1 = 46 / 50 \times 100 = 92$	4	0	0	0	1
	$CI = (C_a \times 5 + C_b \times 4 + C_c \times 3 + C_d \times 2 + C_e \times 1) / 50 \times 100$					
II	FEEDBACK	A	B	C	D	E
1	Student feedback about faculty	/				
2	Feedback from Student regarding curriculum		/			
3	Feedback from Staff regarding curriculum		/			
4	Feedback from Alumni regarding curriculum		/			
5	Feedback from Experts (Academic / Industry) student regarding curriculum				/	
	$5 + 12 + 0 + 2 + 0 = 19 / 25 \times 100 = 76$	1	3	0	1	0
III	TEACHING LEARNING PROCESS	A	B	C	D	E
1	Remedial course details	/				
2	Slow learner details	/				
3	Student participation in Seminar / Conference / Symposium			/		
4	Seminar / Workshop / Training Programme organized				/	
5	Technical Symposium organized				/	
6	Invited Experts / Eminent Professor / Guest Lecture /			/		

	Scientist details					
7	Project Work details	/				
8	Student Publications				/	
9	Faculty Training Programme			/		
10	Faculty participation in Seminar / Conference				/	
11	Industrial visit / NSS / Annual Sports Meet participation			/		
12	Internship Training details			/		
13	Syllabus coverage details	/				
14	Lab coverage details	/				
15	Course Attainment	/				

Name of the Department: *Information Reliance* (2021 - 2022) Date: *23/1/23*

16	Internal Assessment details	/				
17	Series Test Marks and Analysis	/				
18	End Semester details, Result Analysis and Rank list	/				
19	Student Arrear details	/				
	$50+10+15+8+10 = 73/95 \times 100 = 77$	10	0	5	4	0
IV	RESEARCH, CONSULTANCY AND EXTENSION ACTIVITIES	A	B	C	D	E
1	National and International conferences organized			/		/
2	Patents registered			/		
3	Patents published			/		
4	On-going Research Project details					/
5	Research Projects completed and grants received					/
6	Faculty publications (SCI / Web of Science / Scopus)		/			
7	Faculty h-index			/		
8	Faculty i10-index			/		
9	Book Chapter details			/		
10	Research Awards received by faculty and students		/			
11	Consultancy Services provided and funds received					/
12	Promotion of Industry Institute Interaction and R & D					/
	$0+8+15+0+5 = 28/60 \times 100 = 47$	0	2	5	0	5
V	EFFECTIVE USE OF ICT	A	B	C	D	E
1	PPT prepared by faculty	/				
2	Smart Room usage register	/				
3	Industry Tie-up programmes					/
4	Learning Materials provided	/				
5	Other Interactive materials prepared / used, NPTEL course content used		/			
	$15+4+0+0+1 = 20/25 \times 100 = 80$	3	1	0	0	1
VI	STUDENT SUPPORT AND PROGRESSION	A	B	C	D	E
1	Mentorship details	/				
2	Alumni Interaction programme conducted	/				
3	Question Bank	/				
4	Placement details		/			
5	Student Counselling details		/			
6	Student Membership details IEEE, IET, ISTE, CSI, NCSSS and other professional bodies				/	

	$15+8+0+2+0 = 25/30 \times 100 = 83$	3	2	0	1	0
VII	GOVERNANCE AND LEADERSHIP	A	B	C	D	E
1	Faculty Awards			/		
2	Industry Academic Collaborations					/
3	Faculty Ph.D details	/				
4	Parent Teacher Meeting details					/
5	Training Programme organized for Professional Development of Teaching / Non-Teaching staff		/			
	$5+4+3+0+2 = 14/25 \times 100 = 56$	1	1	1	0	2

Name of the Department: *Information Technology* (2021 – 2022) Date: *28/1/22*

Letter grade	Weightage
A	5
B	4
C	3
D	2
E	1

Category wise percentage is calculated with the following formula

$$C_1 = (C_a \times 5 + C_b \times 4 + C_c \times 3 + C_d \times 2 + C_e \times 1) / 50 \times 100 \text{ ----- (1)}$$

$$C_2 = (C_a \times 5 + C_b \times 4 + C_c \times 3 + C_d \times 2 + C_e \times 1) / 25 \times 100 \text{ ----- (2)}$$

$$C_3 = (C_a \times 5 + C_b \times 4 + C_c \times 3 + C_d \times 2 + C_e \times 1) / 95 \times 100 \text{ ----- (3)}$$

$$C_4 = (C_a \times 5 + C_b \times 4 + C_c \times 3 + C_d \times 2 + C_e \times 1) / 60 \times 100 \text{ ----- (4)}$$

$$C_5 = (C_a \times 5 + C_b \times 4 + C_c \times 3 + C_d \times 2 + C_e \times 1) / 25 \times 100 \text{ ----- (5)}$$

$$C_6 = (C_a \times 5 + C_b \times 4 + C_c \times 3 + C_d \times 2 + C_e \times 1) / 30 \times 100 \text{ ----- (6)}$$

$$C_7 = (C_a \times 5 + C_b \times 4 + C_c \times 3 + C_d \times 2 + C_e \times 1) / 25 \times 100 \text{ ----- (7)}$$

C_a – Number of times 'A' rating has obtained in that category

C_b – Number of times 'B' rating has obtained in that category

C_c – Number of times 'C' rating has obtained in that category

C_d – Number of times 'D' rating has obtained in that category

C_e – Number of times 'E' rating has obtained in that category

The department performance index (Absolute) P_a :

$$P_a = [(184 + 76 + 157 + 94 + 80 + 83 + 56) / 10] = 72.7$$

$$P_a = [(C_1 \times 2) + (C_2 \times 1) + (C_3 \times 2) + (C_4 \times 2) + (C_5 \times 1) + (C_6 \times 1) + (C_7 \times 1)] / 10$$

The department performance index (Relative) P_r : *86.5*

$$P_r = P_a / \text{Max } (P_a)$$

Observations of the Academic Audit Committee Members

* Curricular Aspects, Use of ICT, Student Support and Progression are Excellent.

- * Teaching Learning Process is Good and can be improved.
- * Special care is needed in Research, Consultancy and Extension Activities, Governance and Leadership.

Name of the Department: *Information Technology* (2021 – 2022) Date: *23/1/2023*

Overall Observations

1. Conduct conferences as it is very poor.
2. Motivate the faculty members to participate in research related activities.
3. Consultancy Services needs improvement.
4. Try to improve Industry Tie-up at department levels.
5. Conduct Parent-Teacher meeting to inform the status about the students.

[Signature]
S. FELIX STEPHEN

Name & Signature

[Signature]
21/2/23

Dr. J.P. Jayan
Director IQAC
Poornul Islam Centre for Higher Education
Maraccoil - 629180. Kanyakumari District,
Tamil Nadu.

[Signature]
13/3/23

Prof. Dr. A. Shajin Nargunam, M.E., Ph.D.,
Director-Academic Affairs
Poornul Islam Centre for Higher Education
Thuckalay.

Noorul Islam
Kumaracoli, Thuvankulam

8.3 Improvement in Faculty Qualification/Contribution (15)

Total Marks 15.00

Institute Marks : 15.00

Academic Performance	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
No. of faculty members with Ph.D. degree	8.00	8.00	8.00
No. of publications in peer reviewed journals	13.00	21.00	16.00
No. of publications in conferences	40.00	32.00	4.00

8.4 Improvement in Academic Performance (10)

Total Marks 10.00

Institute Marks : 10.00

Academic Performance	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
Academic Performance Index (API) of the First-Year Students in the Program (Refer to section 4.3)	7.05	5.65	7.20
Academic Performance Index (API) of the Second-Year Students in the Program (Refer to section 4.4)	7.56	6.84	8.25
Academic Performance Index (API) of the Third-Year Students in the Program (Refer to section 4.5)	7.26	7.45	7.92

9 STUDENT SUPPORT AND GOVERNANCE (120)

Total Marks 115.00

9.1 First Year Student-Faculty Ratio (FYSFR) (5)

Total Marks 5.00

Please provide First year faculty information considering load

Name of the faculty member	PAN No.	Qualification	From Engineering Courses	Date of Receiving Highest Degree	Area of Specialization	Designation	Date of joining	Currently Associated (Yes / No)	Nature Of Association (Regular / Contract)	Date Of leaving(In case Currently Associated is 'No')
Uma Devi K	ACOPU0961E	M.SC. (Mathematics) and PhD	No	26/08/2015	Fuzzy Algebra	Assistant Professor	04/01/2008	Yes	Regular	
Judith J E	AMUPJ1554A	M.E. and Ph.D.	Yes	10/09/2015	Computer Science and Engineering	Associate Professor	07/07/2006	Yes	Regular	
Deepa P	AZOPD9754D	M.A and Ph.D	No	28/01/2020	English Language and Teaching	Assistant Professor	21/01/2008	Yes	Regular	
Vijula Grace K	ADSPV4096N	M.E. and Ph.D.	Yes	16/01/2015	Embedded Systems and VLSI	Associate Professor	11/02/2011	Yes	Regular	
Judson Durai T	BBOPJ8344L	M.E. and Ph.D.	Yes	23/11/2019	Mechanical Engineering	Assistant Professor	15/07/2013	Yes	Regular	
Rabin R	CNNPR0126G	M.E.	Yes	23/04/2018	Mechanical Engineering	Assistant Professor	07/08/2018	Yes	Regular	
Dr. Meena Dev	BJEPM4493H	M.Sc. (Physics) and Ph.D.	No	21/04/2010	Environmental Physics	Associate Professor	01/10/2009	Yes	Regular	
Dr.Abisha Y	BOVPA0352K	M.E. and Ph.D.	Yes	26/11/2025	Civil Engineering	Assistant Professor	18/03/2022	Yes	Regular	
Dr.Edinsha Gla	APWPH7527L	M.Sc. and Ph.D. (Chemistry)	No	23/03/2022	Inorganic Chemistry	Assistant Professor	05/07/2017	Yes	Regular	
Dr.Vennila H	AEMPV3088D	M.E. and Ph.D.	Yes	13/12/2013	Power Systems	Associate Professor	19/07/2019	Yes	Regular	

Year	Sanctioned intake of all UG programs (S4)	No. of required faculty (RF4= S4/20)	No. of faculty members in Basic Science Courses & Humanities and Social Sciences including Management courses (NS1)	No. of faculty members in Engineering Science Courses (NS2)	Percentage= No. of faculty members $((NS1*0.8) + (NS2*0.2)) / (\text{No. of required faculty (RF4)})$; Percentage= $((NS1*0.8) + (NS2*0.2)) / RF$
2023-24(CAYm2)	30	2	4	6	220
2024-25(CAYm1)	60	3	4	6	147
2025-26(CAY)	90	4	4	6	110
Average Percentage					158.89

9.2 Mentoring system (5)

Total Marks 5.00

Mentoring plays a vital role in the overall development of students by of continuous academic and professional support.

- A well-defined mentoring system is implemented to assist students throughout their academic journey and to promote holistic development. Under this system, each faculty member is assigned an average of 30 students to ensure personalized attention and effective guidance.
- Faculty mentors provide counselling and support in areas such as academic performance, career planning, professional development, skill enhancement, and personal concerns, as and when required.
- Mentor-mentee meetings are conducted regularly, typically once a month, to review academic progress, discuss challenges faced by students, and appropriate guidance and motivation. These interactions facilitate the early identification of academic or personal issues and enable timely and effective interventions.
- Mentors maintain regular contact with parents to provide timely updates about their wards.
- Mentors monitor the performance of mentees and identify slow learners as well as advanced learners.
- Special care was provided to slow learners by the concerned faculty members.
- Advanced learners are encouraged for paper publication in conferences, participation in Smart Hackathon enrolling them in NPTEL and other certification courses.



Fig.9.2.1.1 Mentor Responsibilities

Number of faculty mentors: 06

Number of students per mentor: 30

Frequency of meeting: Monthly or Need based

9.3 Feedback Analysis (10)

Total Marks 10.00

9.3.1 Feedback on Teaching and Learning Process and Corrective Measures Taken, if any (5)

Institute Marks : 5.00

- Feedback on the Teaching–Learning Process is systematically collected from students twice each semester, once after the completion of the first series test and again prior to the commencement of the third series test. The feedback is obtained from every class, ensuring a minimum participation of 95% of the total student strength to maintain the reliability and validity of the evaluation process.
- A structured feedback questionnaire comprising 14 questions is employed for this purpose. The questionnaire is designed to assess various dimensions of teaching effectiveness, including subject knowledge, teaching methodology, clarity of presentation, student interaction, punctuality, syllabus coverage, and the overall learning experience.
- Students are clearly instructed to mark the appropriate responses based on their honest perceptions and classroom experiences. The feedback collected is systematically compiled and subjected to quantitative analysis to compute percentage scores for each faculty member, which are subsequently used for evaluation and quality enhancement of the teaching–learning process.

ANNEX :07 01 00

NOORUL ISLAM CENTRE FOR HIGHER EDUCATION, KUMARACOIL
STUDENT'S EVALUATION OF INSTRUCTOR

Please ✓ mark in appropriate place)

S.No	Detail	Quality	1	2	3	4	5	6
1.	Knowledge of Teacher in the subject	Excellent						
		Good						
		Fair						
		Poor						
2.	Clarity and understandability of <u>teachers</u> explanations	Excellent						
		Good						
		Fair						
		Poor						
3.	<u>Teachers</u> willingness to help	Excellent						
		Good						
		Fair						
		Poor						
4.	Regularity in engaging classes	Regular						
		Irregular						
5.	Whether the Teacher dictates notes without explanation	Yes						
		No						
6.	Teacher's ability to organize lectures.	Excellent						
		Satisfactory						
		Poor						
7.	Speed of presentation	Just right						
		Too fast						
		Too slow						
8.	Does the teacher encourage Questioning?	Yes						
		No						
9.	Behavior of the teacher	Pleasant						
		Indifferent						
		Unpleasant						
10.	Use of Black board	Effective						
		Rarely uses						
		Not at all uses						
11.	Sincerity of the teacher	Sincere						
		Not sincere						
12.	Norms of valuation of tests and assignments.	Too Strict						
		Too liberal						
		Just right						
13.	Promptness in valuing tests and assignments.	Quite prompt						
		Not prompt						
14.	Overall teaching effectiveness of the teacher.	Excellent						
		Good						
		Fair						
		Poor						

Fig. 9.3.1.1 Feedback form

Feedback Analysis Process:

The completed feedback forms are collected, verified, and systematically compiled. Each response is assigned a numerical weight based on the predefined rating scale (e.g., Excellent to Poor). The total score for each faculty member is calculated by summing the weighted scores obtained across all 14 parameters. The overall percentage score is computed by comparing the total obtained score with the maximum possible score. The results are analyzed to identify strengths, weaknesses, and areas requiring improvement in teaching performance.

Corrective Measures:

- Faculty members who score below the prescribed benchmark of 70% are counseled and guided by the Head of the Department. The Head of the Department also obtains a detailed explanation from the concerned faculty member regarding the observed gaps and provides appropriate suggestions and corrective measures to enhance teaching effectiveness.
- The recommended corrective actions are duly implemented, and the progress of the faculty members is closely monitored in subsequent feedback cycles to ensure continuous improvement and sustained enhancement of the Teaching–Learning Process.

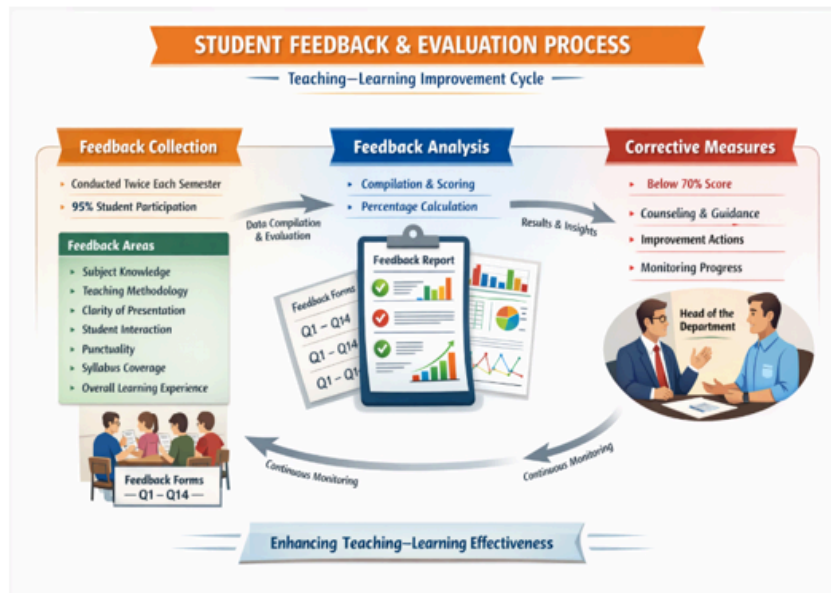


Fig.9.3.1.1 Student Feedback and Evaluation Process

ANNEX :07 01 00
NOORUL ISLAM CENTRE FOR HIGHER EDUCATION, KUMARACOIL
STUDENT'S EVALUATION OF TEACHING STAFF
B.Tech Information Technology , VII Semester
Academic Year 2024-25(Odd) - First Evaluation

Subject Name
Cyber Forensics and Incident Response(IT32A1)

Staff Name
Prof. A.R.Subramonia Iyer

		No.in favor of	Credit	Marks
1. Knowledge of Teacher in the subject	Excellent	10	10	100
	Good	4	6	24
	Fair	1	3	3
	Poor	3	0	0
2. Clarity and understandability of teachers explanations	Excellent	7	10	70
	Good	4	6	24
	Fair	3	3	9
	Poor	4	0	0
3. Teachers willingness to help	Excellent	8	10	80
	Good	5	6	30
	Fair	1	3	3
	Poor	4	0	0
4. Regularity in engaging classes	Regular	14	10	140
	Irregular	4	0	0
5. Whether the Teacher dictates notes without explanation	Yes	5	0	0
	No	13	10	130
6. Teacher's ability to organize lectures.	Excellent	9	10	90
	Satisfactory	3	5	15
	Poor	6	0	0
7. Speed of presentation	Just right	12	10	120
	Too fast	1	2	2
	Too slow	5	2	10
8. Does the teacher encourage Questioning?	Yes	13	10	130
	No	5	0	0
9. Behavior of the teacher	Pleasant	9	10	90
	Indifferent	3	2	6
	Unpleasant	6	0	0
10. Use of Black board	Effective	7	10	70
	Rarely uses	0	3	0
	Not at all uses	11	0	0
11. Sincerity of the teacher	Sincere	12	10	120
	Not sincere	6	0	0
	Too Strict	10	3	30
12. Norms of valuation of tests and assignments.	Too liberal	0	3	0
	Just right	8	10	80
	Quite prompt	11	10	110
13. Promptness in valuing tests and assignments.	Not prompt	7	0	0
	Excellent	5	10	50
	Good	4	6	24
14. Overall teaching effectiveness of the teacher.	Fair	2	3	6
	Poor	7	0	0
	Number of Students Evaluated - 18 out of 20			

$$\frac{1566}{14 \times 10 \times 18} \times 100 = 62.14\%$$

Staff in-charge
21/8/24

21.08.24
Dr. R. Mathu Soothana S. Kumar,
 Head Dept. of Information Technology

Fig. 9.3.1.2 Feedback- First Evaluation

ANNEX :07 01 00

NOORUL ISLAM CENTRE FOR HIGHER EDUCATION, KUMARACOIL
STUDENT'S EVALUATION OF TEACHING STAFF
B.Tech Information Technology , VII Semester
Academic Year 2024-25(Odd) - Second Evaluation

Subject Name
Cyber Forensics and Incident Response(IT32A1)

Staff Name
Prof.A.R.Subramonia Iyer

		No.in favor of	Credit	Marks
1. Knowledge of Teacher in the subject	Excellent	18	10	180
	Good	0	6	0
	Fair	0	3	0
	Poor	0	0	0
2. Clarity and understandability of teachers explanations	Excellent	18	10	180
	Good	0	6	0
	Fair	0	3	0
	Poor	0	0	0
3. Teachers willingness to help	Excellent	18	10	180
	Good	0	6	0
	Fair	0	3	0
	Poor	0	0	0
4. Regularity in engaging classes	Regular	18	10	180
	Irregular	0	0	0
5. Whether the Teacher dictates notes without explanation	Yes	0	0	0
	No	18	10	180
6. Teacher's ability to organize lectures.	Excellent	18	10	180
	Satisfactory	0	5	0
	Poor	0	0	0
	Just right	18	10	180
7. Speed of presentation	Too fast	0	2	0
	Too slow	0	2	0
	Yes	18	10	180
8. Does the teacher encourage Questioning?	No	0	0	0
	Pleasant	18	10	180
9. Behavior of the teacher	Indifferent	0	2	0
	Unpleasant	0	0	0
	Effective	18	10	180
10. Use of Black board	Rarely uses	0	3	0
	Not at all uses	0	0	0
	Sincere	18	10	180
11. Sincerity of the teacher	Not sincere	0	0	0
	Too Strict	0	3	0
	Too liberal	0	3	0
12. Norms of valuation of tests and assignments.	Just right	18	10	180
	Quite prompt	18	10	180
	Not prompt	0	0	0
13. Promptness in valuing tests and assignments.	Excellent	18	10	180
	Good	0	6	0
	Fair	0	3	0
	Poor	0	0	0
14. Overall teaching effectiveness of the teacher.	Excellent	18	10	180
	Good	0	6	0
	Fair	0	3	0
	Poor	0	0	0
Number of Students Evaluated ~ 18 out of 20				4520
		2520	$\times 100$	= 100%
		14 $\times$ 10 $\times$ 18		

Staff In-charge
Dr. R. Mathu Sootthana S. Kumar,
Head Dept. of Information Technology,
Noorul Islam Centre for Higher Education,
Kumaracoil - 626 130.

Fig. 9.3.1.3 FeedbackSecond Evaluation

9.3.2 Feedback on Academic Facilities (5)

Institute Marks : 5.00

Feedback on institutional facilities is systematically collected from all students once every semester to assess the adequacy, accessibility, and effectiveness of the available infrastructure and support services. The feedback covers key facilities such as classrooms, laboratories, library resources, ICT facilities, sanitation, drinking water, hostel amenities, transportation, and other student support services.

A structured feedback instrument with defined parameters and appropriate weightage is used to ensure objective and reliable evaluation. The responses collected are compiled and subjected to quantitative analysis based on the assigned weightage to identify areas of strength as well as aspects requiring improvement.

The analyzed feedback report is then forwarded to the Internal Quality Assurance Cell (IQAC) for review and action. Based on the observations and recommendations of IQAC, necessary corrective and improvement measures are initiated in coordination with the concerned departments and administrative units. The implementation of these measures is monitored periodically to ensure continuous enhancement of institutional facilities and overall student satisfaction.

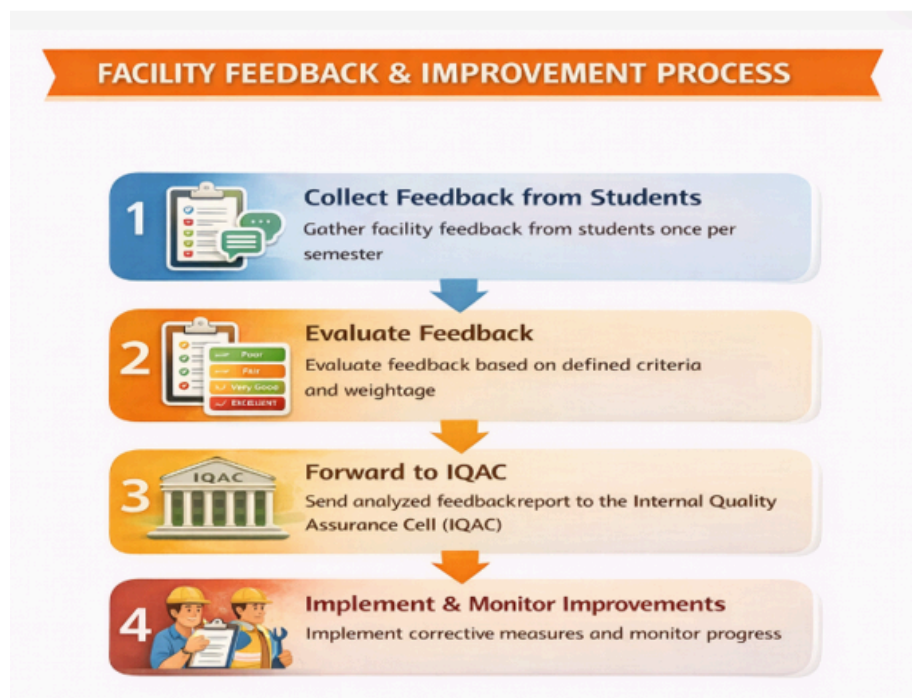


Fig.9.3.2.1 Facility Feedback and Improvement Process



NOORUL ISLAM CENTRE FOR HIGHER EDUCATION

Kumaracoil - 629 180, Kanyakumari District, Tamil Nadu, India
 www.niuniv.com Info@niuniv.com
 +91-9486856101, 04651-250566

**DEPARTMENT OF INFORMATION TECHNOLOGY
 FEEDBACK ON FACILITIES**

NAME OF STUDENT :

CLASS :

ACADEMIC YEAR :

S.No	Evaluation Criteria	Excellent	Very Good	Good	Average	Poor
1.	The classrooms are clean and well maintained					
2.	Laboratories are adequately equipped and maintained					
3.	Library facilities (books, journals, e-resources) are sufficient					
4.	ICT facilities (Wi-Fi, smart classrooms) are adequate					
5.	The campus is green and eco-friendly					
6.	Clean drinking water is available in the department and in the campus					
7.	Toilets/washrooms are hygienic and properly maintained					
8.	Grievances/problems are redressed/solved well in time					
9.	Sports and recreational facilities are adequate					
10.	Canteen and food facilities are hygienic and affordable					
11.	Transportation facilities					
12.	Overall satisfaction with institutional facilities					

Signature of Student

Fig: 9.3.2.2 Feedback form on facilities

9.4 Training and Placement Support (10)

Total Marks 10.00

The Placement and Training Department at NICHE plays a vital role in preparing students for successful careers. The department acts as a bridge between students and industry by organizing campus recruitment drives and maintaining strong relationships with leading companies and organizations.

It focuses on skill development and employability training through programs such as aptitude training, soft skills development, communication skills, resume preparation, group discussions, and mock interviews. Technical training sessions, workshops, seminars, and industrial interaction programs are also conducted to enhance students' practical knowledge.

It supports students in identifying career opportunities, improving professional competencies, and achieving placement in reputed industries or pursuing higher studies.

The schedule of various programmes organized by the department of Placement and Training is as follows.

Table 9.4.1 Finishing School Schedule in 2025-26

Sl.No	DATE	TRAINING	RESOURCE PERSON
1.	09/07/2025	Finishing School	Mr. G.Suresh Gopal,Trainer, Kumarapuram.
2.	23/07/2025	Finishing School	Mrs.N.Krishnammal,Director, Aditya Maths Academy, Nagercoil.
3.	29/07/2025	Finishing School	Mrs.N.Krishnammal,Director, Aditya Maths Academy, Nagercoil.
4.	30/07/2025	Finishing School	Mr. G.Suresh Gopal,Trainer, Kumarapuram.
5.	05/08/2025	Finishing School	Mr. G.Suresh Gopal, Trainer, Kumarapuram. Mob: 9962567291
6.	06/08/2025	Finishing School	Mr. G.Suresh Gopal,Trainer, Kumarapuram. Mob: 9962567291
7.	12/08/2025	Finishing School	Mr.Mahesh.G, Managing Director, Kaattaala Academy, Azhakiamandapam.b: 7974221921.

8.	13/08/2025	Finishing School	Mr.Mahesh.G, Managing Director, Kaattaala Academy, Azhakiamandapam. Mob: 7974221921.
----	------------	------------------	---

Table 9.4.2 Career Guidance Programmes in 2025-26

S.No.	Date	Name of the Programme	Resource Persons
1	22.08.2025	Career Guidance on Overseas Prospects in Higher Education	Dr.C.Selvamony, Managing Director, ACS International Educational Consultancy, Nagercoil. Mob: 9443358904.
2	10.10.2025	Scopes and Prospects of Higher Studies	Mr.P.Mervin Prasanth, Centre Director, Parvathipuram, Nagercoil. Mob: 9487589513.
3	27.10.2025	Artificial Intelligence: Shaping the Future Landscape and Emerging Career Opportunities	r. Vishnu Prasad, Sr.HR Manager & Corporate Trainer, Srishti Innovative, Technopark, Trivandrum. Mob: 7593852498.

Table 9.4.3 Capacity Development Programmes in 2025-26

S.No.	Date	Name of the Programme	Resource Persons
-------	------	-----------------------	------------------

1	22.08.2025	Mastering Salesforce Sales Cloud: A Beginner's Guide	Mr. Kuldeep Sharma, Vice president, Vanshiv Technologies, Jaipur. Mob: 7737476911
2	09.09.2025	Pre Interview Warmup	Mr.Mahesh.G, Managing Director, Kaattaala Academy, Azhakiamandapam. Mob: 7974221921.

Table 9.4..4 Career Guidance Programmes in 2024-25

S.No.	Date	Name of the Programme	Resource Persons
1	17.10.24	Career Guidance on Exploring International Education: A World of Possibilities	Mrs. Raji, Branch Head, Universal Migration, Bakery Junction, Tvm.
2	11.11.2024	Career Guidance on Overseas Prospects in Higher Education	Dr.C.Selvamony, Managing Director, ACS International Educational Consultancy, Nagercoil.
3	14.02.2025	Winning Strategy for Job Interviews	Mr. G.Suresh Gopal, Software Professional, Kumarapuram. Mob: 9962567291

Table 9.4.5 Capacity Development Programmes in 2024-25

Sl.No.	Date	Name of the Programme	Resource Persons
--------	------	-----------------------	------------------

1	27.08.2024	Pre placement Training Session on Get Ready for the Corporate Environment	Mr.S.Gopal, Managing Director, Blue Jain Information Tech, Pvt Ltd., Chennai.
2	03.09.2024	How to Crack Interviews	Mr.G.Suresh Gopal, Project Consultant & Freelance Trainer, Chennai.
3	26.09.2024	Technical Seminar	Mr.Gershon.S, CTO, Ops Monsters, Software Solutions, Bangalore.
4	07.10.2024	Virtual Preplacement Training for CTS	Ms. Archana Pandey
5	10.02.2025	Pre Placement Training Session for TCS	Mr. Vishnu Lal M.P & Ramu Sugathan, Faculty of Career Maker, Career Maker, Trivandrum. Mob: 9188007008
6	12.02.2025	Pre Placement Training Session for TCS	Mr. Akhildethan.S Reasoning Faculty, Career Maker, Trivandrum. Mob: 9496053731
7	13.2.2025	Pre Placement Training Session for TCS	Mr. Vishnu Lal M.P Faculty of Career Maker, Career Maker, Trivandrum. Mob: 9188007008
8	14.02.2025	Pre Placement Training Session for TCS	Mr. Akhildethan.S Reasoning Faculty, Career Maker, Trivandrum. Mob: 9496053731

9	17.02.2025	Pre Placement Training Session for TCS	Mr. Ramu.S.S Faculty, Career Maker, Trivandrum. Mob: 9496053731
10	18.02.2025	Pre Placement Training Session for TCS	Mr. Akhildethan.S Reasoning Faculty, Career Maker, Trivandrum. Mob: 9496053731
11	19.02.2025	Pre Placement Training Session for TCS	Mr. Vishnu Lal M.P Faculty of Career Maker, Career Maker, Trivandrum. Mob: 9188007008

Table 9.4.6 Career Guidance Programmes in 2023-24

Sl.No.	Date	Name of the Programme	Resource Persons
1	21.08.2023	Barclays Life Skills Training on Employability Skills and Interview Skills	A.Kumaraguru, Softskills Trainer, 3/1337,New Housing Board, Kanban Nagar, Karaikudi Cell:9176601822
2	22.08.2023	Barclays Life Skills Training on Employability Skills and Interview Skills	A.Kumaraguru, Softskills Trainer, 3/1337,New Housing Board, Kanban Nagar, Karaikudi, Cell:9176601822
3	23.08.2023	Barclays Life Skills Training on Employability Skills and Interview Skills	A.Kumaraguru, Softskills Trainer, 3/1337,New Housing Board, Kanban Nagar, Karaikudi, Cell:9176601822
4	07.11.2023	Career Guidance on Overseas Prospects in Higher Education	Dr.C.Selvamony, Managing Director, ACS International, Educational, 1-A,Muthamizh Street, Nagercoil, Cell:9443358904

5	16.2.2024	Seminar on Overseas Education	Anitha Thomas, Assistant Destination, Manager,IDP, Pattom, Trivandrum Cell:0471-4411888
---	-----------	-------------------------------	--

Table 9.4.7 Steve Jobs Scholarship Programme Schedule

Sl.No.	Date	Resource Persons
1	15.02.2024	Dr. Ajith Sankar, Director, COX Academy & Research Centre, Trivandrum.
2	11.07.2024	Dr. Ajith Sankar, Director, COX Academy & Research Centre, Trivandrum.
3	12.07.2024	Mr. Sumesh P Kumar, Director, COX Academy & Research Centre, Trivandrum.
4	18.07.2024	Dr. Ajith Sankar, Director, COX Academy & Research Centre, Trivandrum.
5	19.07.2024	Mr. Sumesh P Kumar, Director, COX Academy & Research Centre, Trivandrum.
6	22.07.2024	Mr. Shanish Babu.R, Faculty, COX Academy & Research Centre, Trivandrum.
7	23.07.2024	Mr. Shanish Babu.R, Faculty, COX Academy & Research Centre, Trivandrum.

Table 9.4.8 Capacity Development Programmes in 2023-24

Sl.No.	Date	Name of the Programme	Resource Persons
1	20.09.2023	Pre-Placement Training On "Interview Skills"	Dr. Ajith Sankar Academician, HRD Consultant, Author & Psychosocial Analyst Cell: 9895238190

2	03.11.2023	Pre-Placement Training On Interview Skills and Professional Etiquette	Dr.C.Sekar Associate Professor(Rtd) M.S.University 10/61A,Vijayanagar Swamy Thoppu-629704 Cell:9442307148
3	06.02.2024	Pre-Placement Training On Get Ready for the Corporate Environment	Dr.Ajith Sankar Academician,HRD Consultant,Author & Psychosocial Analyst Cell:9895238190
4	04.04.2024	Pre – placement Training On Corporate Readiness	Dr.Ajith Sankar Org.Psychologist Kowdiar. P.O TVM - 3
5	25.04.2024	Pre – placement Training On Corporate Connect	Dr.A.Shajin Nargunam Pro Vice –Chancellor NICHE

9.5 Start-up and Entrepreneurship Activities (5)

Institute Marks :

9.6 Governance and Transparency (25)

Total Marks 25.00

9.6.1 Availability of the Institutional Strategic Plan and its Effective Implementation and Monitoring (10)

Institute Marks : 10.00

Strategic Plan and Implementation

Institution established as an Engineering College in 1989, had a vision to transform into a distinguished center of excellence in higher education through uncompromising standards of discipline and ethics. The institutions commitment to excellence was recognized in 2006 by Anna University with a ranking as the 19th Best Engineering College.

In 2007 subsequently in 2008, Institution received accreditation from the National Board of Accreditation (NBA) and was designated as a Scientific and Industrial Research Organization (SIRO). It achieved ISO 9001:2000 certification, further attesting to its commitment to quality and academic excellence. The pivotal journey came in 2008 when NICHE was accorded Deemed-to-be- University status and was awarded Grade 'A' by the National Assessment and Accreditation Council (NAAC) in 2015 and reaccredited by NAAC in 2022.

In the year 2016, ranking by NIRF, NICHE secured 66th Rank in the Engineering Stream and 75th Rank in the University Stream, affirming its position, as a leading educational institution. Presently, NICHE has 11 faculties and 24 departments offering a diverse array of undergraduate, postgraduate and research programs in the field of Engineering, Arts, Science and Management disciplines.

All academic programs offered by NICHE have approvals from relevant statutory bodies such as the All-India Council for Technical Education (AICTE), University Grants Commission (UGC), Director General of Shipping (DGS) and Rehabilitation Council of India (RCI). NICHE is a proud member of esteemed organizations like International Association of Universities (IAU), Association of Indian Universities (AIU), National Academic Depository (NAD) and National Digital Library of India (NDL).

NICHE has made significant strides in research and innovation, with 3016 publications indexed in Scopus, with an impressive h index of 56, accompanied by more than 10583 citations. Moreover, NICHE has 179 files and published patents and 31 patents have already been granted, emphasizing its commitment to pioneering research and technological advancement.

Education not only enrich the minds with invaluable knowledge but also enhance the capacity for critical thinking, analysis and understanding of the world around. It serves as a gateway to new perspectives, ideologies, beliefs and cultures, broadening the horizons and enriching human lives.

Noorul Islam Centre for Higher Education (NICHE) has established itself as a beacon of collaborative learning, drawing upon the best practices from around the globe to foster innovation and creativity. We are committed to provide students with ample opportunities to apply their knowledge as innovators and to be valuable contributors to society.

With over 70 years of dedicated service in education, NICHE has emerged as one of the premier Deemed University, accredited for the second cycle by NAAC. NICHE mission extends beyond academic excellence to encompass the holistic development of the students, promoting inclusivity, diversity and provides an excellent learning environment.

Under the visionary leadership of the Honorable Chancellor, Dr. A. P. Majeed Khan, NICHE aspires to be a world-class center of excellence in training, research, and innovation. NICHE commitment to excellence is exemplified by the successful launch of NIUSAT, a nano-satellite developed by the faculty and students.

NICHE offers a welcoming and supportive atmosphere where students are encouraged to share their opinions and ideas. Dedicated faculty members are committed to nurture the next generation of leaders and provide the latest technological tools and resources to maximize their potential.

NICHE, is a vibrant academic community, where academic excellence is coupled with strong emphasis on personal growth and development. The higher education journey at NICHE promises an enriching and rewarding career with plethora of opportunities for academic and extracurricular pursuits.

NICHE, being the temple of learning where innovation meets excellence, and embarks on a journey of knowledge, growth, and transformation.

1. Goals and Objectives

Short-term Goals

- Work closely with academic departments and faculties to ensure effective coordination of outreach activity to enhance undergraduate and postgraduate admissions processes.
- Support student well-being by providing the greatest opportunity for all students to excel and strengthen the collaboration between academic departments and faculties and central services.
- Device effective means and mechanisms to portray the academic strengths, facilities and services of NICHE to the aspirants through print and electronic media and proper policies to monitor the activity and make improvements.
- Open avenues for providing excellent academic experience for all the students and ensure that NICHE fully equips graduates to excel.
- Design methods to improve the discovery-led research undertaken to the highest standards of rigour and integrity and provide freedom to investigate problems of significance, work with to be curiosity-driven or challenge-led.
- Enhance faculty development programs to ensure teaching staff are equipped with emerging technologies and pedagogical advancements.
- Upgrade campus infrastructure and facilities to provide a modern and conducive learning environment for students and faculty.
- Increase industry-academia collaborations through partnerships, internships, and joint research projects and networking.
- Strengthen student support services, including counselling, career guidance, and academic advising, to promote holistic student development.
- Improve research funding acquisition strategies to support faculty research initiatives and infrastructure development.
- Expand outreach efforts to attract more foreign students and foster diversity within the student body.
- Enhance ICT tools and resources in academic and administrative areas to streamline processes and improve efficiency.
- Develop and implement a strategic plan for increasing high-impact factor publications by faculty members.
- Establish consultancy services and outreach programs to engage with industries and corporates, fostering collaboration and knowledge exchange.

Long-term Goals

- Enhance the opportunities and support for early-career researchers.
- Invest substantially in the research environment, both human assets and physical infrastructure.
- Increase the scale and scope of central research fund to grow in capacity to fund major research initiatives.
- Work with partners to create a world-class regional innovation ecosystem to enable NICHE to attract the best researchers and students from around the world.
- Establish interdisciplinary research centers and institutes to address pressing societal challenges and contribute to knowledge creation and dissemination.
- Implement sustainable practices across campus operations, including energy efficiency measures, waste reduction initiatives, and environmental education programs.
- Continuously assess and adapt strategic initiatives based on feedback from stakeholders, emerging trends, and evolving needs to ensure long-term relevance and impact.
- Engage with local communities through outreach programs, volunteer initiatives, and partnerships to address social, economic, and environmental issues.
- Contribute to society through teaching and research activities.

2. Academic Excellence

Faculty Development Programs: Implement comprehensive faculty development programs to enhance teaching effectiveness, research productivity, and professional growth. This can include workshops, seminars, and mentoring programs to support faculty members in staying updated with the latest pedagogical techniques and disciplinary methods.

Curriculum Enhancement: Continuously review and update academic curricula to ensure relevance to industry needs, emerging trends, and technological advancements. Encourage interdisciplinary collaboration and experiential learning opportunities to make students in mastering education.

Quality Assurance Mechanisms: Establish robust quality assurance mechanisms, including internal and external assessment processes, to monitor and evaluate the quality of academic programs, teaching methodologies and student learning outcomes. Regularly review accreditation standards and benchmark against peer institutions to maintain high standards of academic excellence.

Research Culture Promotion: Foster a vibrant research culture by providing resources, infrastructure and incentives to support faculty research initiatives. Encourage interdisciplinary collaboration and promote a supportive environment for scholarly inquiry and knowledge creation.

Student-Centred Learning: Prioritize student-centred learning approaches that cater to diverse learning styles and preferences. Implement active learning strategies, collaborative projects and hands-on experiences to engage students and foster critical thinking, creativity and problem-solving skills.

Academic Support Services: Strengthen academic support services, including tutoring, advising and academic counselling, to provide personalized assistance and guidance to students. Ensure accessibility of support services for students with diverse backgrounds and learning needs.

Assessment and Feedback Mechanisms: Implement effective assessment and feedback mechanisms to evaluate student progress, identify areas for improvement and provide timely feedback for continuous learning and development. Encourage a culture of self-reflection and continuous improvement among students and faculty.

Integration of Technology: Leverage technology to enhance teaching and learning experiences, facilitate 24x7 learning opportunities and provide access to digital resources and online learning platforms. Invest in educational technologies and infrastructure to support blended learning approaches and virtual collaboration.

Collaboration and Partnerships: Foster collaboration and partnerships with industry, government agencies and other educational institutions to enrich academic programs, provide real-world learning experiences and facilitate research collaborations.

Continuous Improvement Culture: Cultivate a culture of continuous improvement by encouraging innovation, experimentation, and reflection among faculty, staff, and students. Promote a growth mind-set and a commitment to lifelong learning and professional development to sustain academic excellence over the long term.

Infrastructure Development

Comprehensive Infrastructure Assessment: Conduct a thorough assessment of existing infrastructure facilities, including academic buildings, laboratories, libraries, student accommodations, sports facilities, and administrative offices. Identify areas requiring immediate upgrades or expansion to meet the emerging needs.

Long-Term Infrastructure Master Plan: Develop a long-term infrastructure master plan outlining the vision, goals, and timelines for enhancing campus infrastructure to Institutions of Eminence standards. This plan should encompass new construction projects, renovation initiatives and technology upgrades to create a modern and sustainable campus environment.

Budget Allocation and Resource Mobilization: Allocate sufficient financial resources and establish mechanisms for resource mobilization to fund infrastructure development projects. Explore opportunities for public-private partnerships, government grants and philanthropic donations and alumni contributions to supplement institutional funds.

Prioritize Critical Infrastructure Projects: Prioritize critical infrastructure projects based on their strategic importance, impact on academic programs, and alignment with NICHE objectives. Develop a prioritization framework to guide decision-making and ensure optimal utilization of resources.

Sustainable and Green Infrastructure Practices: Incorporate sustainable and environment-friendly design principles for infrastructure development projects to minimize ecological impact and promote energy efficiency, water conservation and waste reduction. Adopt green building standards and seek certifications such as LEED (Leadership in Energy and Environmental Design) to demonstrate commitment to sustainability.

Stakeholder Engagement and Consultation: Engage stakeholders including faculty, staff, students, alumni and community members in the planning and decision-making process for infrastructure development. Solicit feedback, ideas and suggestions to ensure that infrastructure projects meet the diverse needs and preferences of the campus community.

Project Management and Monitoring: Establish a dedicated project management office or committee responsible for overseeing infrastructure development initiatives. Implement project management practices including project planning, budgeting, scheduling, risk management and quality assurance. Regularly monitor progress, identify bottlenecks and take corrective actions to ensure timely completion of projects.

Quality Assurance and Compliance: Adhere to relevant regulatory requirements, building codes and safety standards in all infrastructure development activities. Implement quality assurance mechanisms to ensure that construction projects meet specified quality standards and comply with contractual obligations. Conduct regular inspections and audits to monitor compliance and address any deviations promptly.

Technological Integration and Innovation: Leverage technology and innovation to enhance infrastructure development processes and improve the functionality, efficiency and sustainability of campus facilities. Explore opportunities for smart infrastructure solutions, digitalization and automation to optimize resource utilization and enhance user experience.

Student Support Services

Career Counseling and Guidance: Develop comprehensive career counseling and guidance services to help students navigate the rapidly evolving job market and identify career paths aligned with their interests, skills and aspirations. Provide resources, workshops and one-on-one counseling sessions to assist students in making informed career decisions.

Industry-Relevant Skill Development: Offer industry-relevant skill development programs and workshops to equip students with the practical skills and competencies demanded by the evolving job market. Collaborate with industry partners to design training modules, internships and certification programs that address emerging trends and technologies.

Internship and Placement Assistance: Establish robust internship and placement assistance programs to facilitate experiential learning opportunities and transition students seamlessly into the workforce. Forge partnerships with leading companies and organizations to secure internship placements and job opportunities for students across diverse sectors.

Entrepreneurship and Innovation Support: Foster an entrepreneurial mind-set among students and provide support for start-up ventures through entrepreneurship development programs, incubation centres, and mentorship initiatives. Encourage students to develop innovative solutions to real-world challenges and provide resources for business planning, funding and networking.

Mental Health and Well-being Services: Prioritize mental health and well-being services to support students' emotional and psychological needs amidst the pressures of academic life and career uncertainty. Offer counseling services, stress management workshops and mindfulness programs to promote mental resilience and self-care.

Technology Integration for Student Services: Leverage technology to enhance student support services, including online counseling platforms, virtual career fairs, and interactive learning resources. Implement digital tools and platforms for academic planning and access to academic resources to streamline administrative processes and improve student experience.

Financial Aid and Scholarships: Expand financial aid and scholarship opportunities to ensure access to higher education for students from economically disadvantaged backgrounds. Establish scholarship programs based on merit, financial need and diversity criteria to support students' educational aspirations and alleviate financial barriers.

Alumni Engagement and Networking: Harness the potential of alumni networks to provide mentorship, career guidance, and networking opportunities for current students. Organize alumni events, industry panels and networking sessions to facilitate meaningful connections and knowledge sharing between students and alumni working in various industries.

Research and Innovation

Establish Research Centre of Excellence: Create specialized research centres within NICHE focusing on key areas of strength and expertise. These centres should foster interdisciplinary collaboration, attract renowned researchers and drive impactful research projects aligned with national priorities and industry needs.

Encourage Collaborative Research Projects: Foster collaboration between faculty members, industry partners and other academic institutions to undertake collaborative research projects. Facilitate networking opportunities, joint grant applications and research consortia to leverage collective expertise and resources.

Strengthen Research Infrastructure: Invest in state-of-the-art research facilities, equipment and technology platforms to support cutting-edge research across disciplines. Upgrade existing infrastructure and establish centralized research facilities to enhance accessibility and utilization by faculty and students.

Support for Early-Career Researchers: Provide targeted support and funding opportunities for early-career researchers to kick-start their research careers and establish independent research programs. Offer mentorship, training and grant writing workshops to assist researchers in securing external funding and advancing their research agendas.

Seed Funding for Pilot Projects: Allocate seed funding grants to support the initiation of pilot projects, proof-of-concept studies and preliminary research investigations. Encourage faculty members to explore innovative research ideas and generate preliminary data to strengthen future grant applications.

Capacity Building Programs: Develop capacity building programs and workshops to enhance research skills, grant writing capabilities and research ethics among faculty members and research students. Provide resources and support for professional development activities such as attending conferences, workshops and specialized training programs.

Streamlined Grant Application Process: Streamline the grant application process and provide assistance to faculty members in navigating funding opportunities, preparing grant proposals and complying with funding agency requirements. Establish a dedicated research support office or committee to provide guidance and administrative support throughout the grant application process.

Collaboration with Funding Agencies: Forge strategic partnerships and collaborations with government funding agencies, research councils, industry associations and philanthropic organizations to access funding opportunities and research grants. Actively engage with funding agencies to understand their priorities, funding mechanisms and application requirements.

Community Engagement

Needs Assessment and Stakeholder Consultation: Conduct a comprehensive needs assessment to understand the challenges, priorities, and aspirations of the nearby community and underdeveloped villages. Engage stakeholders, including community leaders, local government officials and residents, in the planning process to ensure their voices are heard and their needs are addressed.

Collaborative Partnerships: Establish collaborative partnerships with local community organizations, NGOs, government agencies and other stakeholders to leverage resources, expertise and networks for community development initiatives. Foster trust, transparency and mutual respect in partnerships to ensure effective collaboration and sustainable outcomes.

Community-Based Projects: Develop and implement community-based projects that address identified needs and priorities, such as healthcare, education, sanitation, infrastructure development and livelihood enhancement. Involve community members in project planning, implementation and monitoring to promote ownership and sustainability.

Skill Development and Capacity Building: Offer skill development programs, vocational training, and capacity-building workshops to empower community members with the knowledge, skills and resources needed for economic empowerment and self-reliance. Provide training in areas such as entrepreneurship, agriculture, healthcare and technology to enhance livelihood opportunities and improve quality of life.

Education and Literacy Initiatives: Support education and literacy initiatives in the nearby community and underdeveloped villages by establishing community learning centres, libraries and adult education programs. Provide access to educational resources, digital literacy training and scholarships to promote lifelong learning and educational attainment.

Health and Wellness Programs: Promote health and wellness initiatives through awareness campaigns, health screenings and preventive healthcare services targeting common health issues in the community. Collaborate with healthcare providers, NGOs, and government agencies to improve access to healthcare services and promote healthy behaviors.

Environmental Sustainability Projects: Implement environmental sustainability projects focused on conservation, waste management, renewable energy and climate resilience to protect natural resources and promote sustainable development in the community. Raise awareness about environmental issues and engage community members in conservation efforts through tree planting, clean- up drives and eco-friendly practices.

Cultural and Heritage Preservation: Preserve and promote the cultural heritage and traditions of the local community through cultural festivals, art exhibitions, storytelling sessions and heritage preservation initiatives.

Monitoring and Evaluation: Define clear and measurable Key Performance Indicators (KPIs) for each strategy, reflecting the desired outcomes, outputs and impacts. Develop specific KPIs tailored to the objectives of academic excellence, infrastructure development, student support services, research and innovation and community engagement initiatives.

Monitoring and Evaluation Framework: Develop a comprehensive monitoring and evaluation framework outlining the scope, objectives, methodologies, timelines and responsibilities for monitoring and evaluating the implementation of each strategy. Align the framework with institutional goals, strategic priorities and stakeholder expectations to ensure relevance and effectiveness.

Data Collection and Reporting Mechanisms: Establish protocols and tools for collecting, managing and analyzing data related to the implementation of each strategy. Utilize a combination of quantitative and qualitative methods, including surveys, interviews, focus groups, observations, document reviews and performance metrics, to capture relevant information. Regularly compile, analyze and report monitoring data to stakeholders through progress reports, dashboards and presentations.

Baseline Assessment: Conduct baseline assessments to establish the current status, strengths, weaknesses, opportunities, and threats related to academic excellence, infrastructure development, student support services, research and innovation and community engagement. Use baseline data to set benchmarks, track progress and measure changes over time.

Regular Progress Reviews: Conduct regular progress reviews to assess the implementation status, achievements, challenges, and lessons learned for each strategy. Hold periodic meetings or review sessions with key stakeholders to review progress against objectives, identify bottlenecks and make informed decisions to address gaps or deviations from the plan.

Performance Evaluation and Impact Assessment: Evaluate the performance and impact of each strategy based on the predefined KPIs and evaluation criteria. Assess the effectiveness, efficiency, relevance, sustainability and equity of interventions in achieving desired outcomes and impacts. Use evaluation findings to identify successes, areas for improvement and actionable recommendations for future planning and decision-making.

Knowledge Sharing and Dissemination: Document and disseminate monitoring and evaluation findings, lessons learned, success stories and best practices to internal and external stakeholders. Share knowledge and insights through reports, presentations, publications and online platforms to promote learning, collaboration, and replication of effective approaches.

Research and innovation initiatives are central to NICHE's mission, and seek to advance knowledge, drive innovation and address persistent societal challenges through cutting- edge research and collaborative partnerships. Finally, NICHE commitment to community engagement reflects the importance of social responsibility and active citizenship in helping local communities to address their needs, foster mutual learning and promote sustainable development. Together, these strategic plans form a cohesive framework for advancing NICHE's institutional vision and creating positive impact to the society.

9.6.2 Governing Body, Administrative Setup, Functions of Various Bodies, Service Rules, Recruitment procedures and Promotion Policies (10)

Institute Marks : 10.00

- The governance structure of NICHE is designed to achieve the institution's vision and mission.
- The Chancellor, as the highest authority, provides strategic direction and ensures the advancement of the institutional objectives. The Pro-Chancellor assists the Chancellor and supports the overall governance of the institution.
- The Vice-Chancellor serves as the principal academic and executive officer of the institution and functions as the Chairperson of all statutory bodies. The Vice-Chancellor is responsible for academic leadership, governance, and administration in accordance with statutory regulations and by laws. The Pro Vice-Chancellors assist the Vice-Chancellor in academic planning, implementation of policies, monitoring academic standards, and coordinating academic and administrative activities.
- The Registrar, acting as the Secretary to the Board of Management and Academic Council, oversees day-to-day administrative operations, statutory compliance, record maintenance, and official correspondence, and reports directly to the Vice-Chancellor.
- Financial governance is ensured by the Finance Officer, who is responsible for budgeting, financial planning, fund mobilization, and effective utilization of financial resources.
- The Controller of Examinations manages the conduct of examinations and evaluation processes, ensuring fairness, transparency, and academic integrity.
- Various Directors coordinate institution-wide academic, research, quality assurance, accreditation, and student development activities.
- At the academic unit level, Deans and Heads of Departments oversee curriculum delivery, research initiatives, and departmental administration.

Functioning of the Institutional Bodies

- The EC is the principal executive body of the University with powers to make rules of the Institution and is the final decision-making body related to academic, administrative, personnel, financial and developmental matters
- The Academic Council (AC) is the principal academic body of the Institution and is responsible for the maintenance of standard of teaching, research and training, approval of syllabus, co-ordination of research activities and examinations.
- The Anti-Ragging Committee is a statutory body constituted in accordance with UGC guidelines to prevent, prohibit, and eliminate ragging in the institution.
- The Disciplinary Committee is constituted to investigate cases of misconduct and to take appropriate disciplinary action in order to maintain institutional discipline.
- Grievance redressal committee is formed in accordance with the UGC guidelines to address and resolve day-to-day grievances of students and parents.
- The Internal Complaints Committee (ICC) at NICHE is constituted in accordance with the Sexual Harassment of Women at Workplace Act, 2013 and the UGC Regulations. The ICC is responsible for preventing, prohibiting, and redressing complaints of sexual harassment of women students and employees within the University campus. The Committee ensures a safe, secure, and respectful academic and work environment.
- The prime task of the IQAC is to develop a system for conscious, consistent, and catalytic improvement in the overall performance of institutions. For this, IQAC channelizes all efforts and measures of the institution towards promoting its holistic academic excellence. The work of the IQAC is the first step towards internalization and institutionalization of quality enhancement initiatives. Its success depends upon the sense of belongingness and participation it can inculcate in all the constituents of the institution. It will not be yet another hierarchical structure or a record-keeping exercise in the institution. It will be a facilitative and participative voluntary system/unit/organ of the institution. It has the potential to become a vehicle for ushering in quality enhancement by working out planned interventionist strategies to remove deficiencies and enhance quality like the "Quality Circles" in industries.
- The Board of Studies (BoS) is the basic constituent of the academic system of the Institution which includes framing the content of various courses, reviewing and updating the syllabus from time to time, introducing new courses of study etc.

- The Institution has clearly documented service rules governing appointment, probation, duties, workload, leave, pay conduct, performance appraisal, disciplinary procedures and grievance redressal mechanisms. Provisions related to transfer, training, retirement, and termination are also clearly specified. These rules are communicated to all employees to ensure fairness, consistency, and transparency in service conditions.

The Committee details, including composition and functions, are documented and enclosed as Annexure IX.

9.6.3 Transparency (5)

Institute Marks : 5.00

- NICHE ensures transparency in institutional governance by systematically documenting and disseminating information related to academic, administrative, financial, and student welfare policies through its official website (niuniv.com).
- The institution provides open access to key policy documents, rules, procedures, and codes of conduct, enabling stakeholders to clearly understand institutional processes and responsibilities.
- Details of committees, including anti-ragging and internal compliance cells, along with contact information of responsible officials, are publicly displayed to promote accountability.
- Regular circulars and notifications regarding academic schedules, examinations, scholarships, and other institutional matters are communicated through official channels. This structured and accessible dissemination of information ensures transparency, enhances stakeholder trust, and supports participative and effective institutional governance.

9.7 Budget Allocation, Utilization, and Public Accounting at Institute Level (12)

Total Marks 12.00

Total Income at Institute level: For CFY,CFYm1,CFYm2 & CFYm3

CFY : (Current Financial Year),

CFYm1 : (Current Financial Year minus 1),

CFYm2 : (Current Financial Year minus 2) and

CFYm3 : (Current Financial Year minus 3)

Table 1 - CFY 2024-2025

Total Income 2887.78				Actual expenditure(till...):	Total No. Of Students	Expenditure per student
Fee	Govt.	Grants	Other sources(specify)			
2740	0	136.07	11.71	3592.76	1887	1.90

Table 2 - CFYm1 2023-2024

Total Income 2887.78				Actual expenditure(till...):	Total No. Of Students	Expenditure per student
Fee	Govt.	Grants	Other sources(specify)			
2740	0	136.07	11.71	3592.76	1887	1.90

Table 3 - CFYm2 2022-2023

Total Income 2541.94				Actual expenditure(till...):	Total No. Of Students	Expenditure per student
Fee	Govt.	Grants	Other sources(specify)			
2493.5	0	36.84	11.60	3140.30	1586	1.98

Table 4 - CFYm3 2021-2022

Total Income 2767.38				Actual expenditure(till...):	Total No. Of Students	Expenditure per student
Fee	Govt.	Grants	Other sources(specify)			
2737.15	0	13.48	16.75	2514.84	1860	1.35

Items	Budgeted in 2024-2025	Actual Expenses in 2024-2025 till	Budgeted in 2023-2024	Actual Expenses in 2023-2024 till	Budgeted in 2022-2023	Actual Expenses in 2022-2023 till	Budgeted in 2021-2022	Actual Expenses in 2021-2022 till
Infrastructure Built-Up	250.00	17.36	75.00	179.55	90.00	106.74	15.00	9.35
Library	44.48	1.10	40.44	1.93	38.51	3.94	25.06	0.10
Laboratory equipment	100.00	0.17	110.04	5.19	25.00	33.90	20.00	3.47
Teaching and non-teaching sta	1699.00	1029.99	1417.69	1373.90	1333.69	1313.01	1390.90	1315.06
Outreach Programs	115.59	6.46	115.35	114.65	12.47	10.14	9.70	6.67
R&D	185.86	59.33	173.54	91.55	76.77	81.03	60.56	25.51
Training, Placement and Indust	81.90	67.87	76.04	57.56	69.53	71.65	66.63	69.91
SDGs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Entrepreneurship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Others, specify	2525.72	1366.66	2110.27	1768.43	1353.82	1519.89	1109.39	1084.77
Total	5002.55	2548.94	4118.37	3592.76	2999.79	3140.30	2697.24	2514.84

=====

Total Income at Institute level: For CFY,CFYm1,CFYm2 & CFYm3

CFY: (Current Financial Year),

CFYm1 : (Current Financial Year minus 1),

CFYm2 : (Current Financial Year minus 2) and

CFYm3 : (Current Financial Year minus 3)

Table 1 :: CFY 2024-2025

Total Budget 390000		Actual expenditure (till...): 389122		Total No. Of Students 106
Demanded	Actual Allocated	Actual Expenditure	% Spent	Expenditure per student
500000	390000	389122	99.77	3670.96

Table 2 :: CFYm1 2023-2024

Total Budget 5680000		Actual expenditure (till...): 5676850		Total No. Of Students 99
Demanded	Actual Allocated	Actual Expenditure	% Spent	Expenditure per student
5800000	5680000	5676850	99.944	57341.92

Table 3 :: CFYm2 2022-2023

Total Budget 980000		Actual expenditure (till...): 976269		Total No. Of Students 84
Demanded	Actual Allocated	Actual Expenditure	% Spent	Expenditure per student
1100000	980000	976269	99.619	11622.25

Table 4 :: CFYm3 2021-2022

Total Budget 4125000		Actual expenditure (till...): 4120020		Total No. Of Students 84
Demanded	Actual Allocated	Actual Expenditure	% Spent	Expenditure per student
5852837	41,25,000	4120020	99.879	49047.86

Items	Budgeted in 2024-2025	Actual Expenses in 2024-2025 till	Budgeted in 2023-2024	Actual Expenses in 2023-2024 till	Budgeted in 2022-2023	Actual Expenses in 2022-2023 till	Budgeted in 2021-2022	Actual Expenses in 2021-2022 till
-------	--------------------------	---	--------------------------	---	--------------------------	---	--------------------------	---

Laboratory equipment	400000	0389122	5700000	5676850	1000000	976269	3948563	3921824
Software	100000	0	100000	0	100000	0	1545074	198178
SDGs	0	0	0	0	0	0	0	0
Support for faculty developmei	0	0	0	0	0	0	35200	0
R & D	0	0	0	0	0	0	170000	0
Industrial Training, Industry exp	0	0	0	0	0	0	0	0
Miscellaneous Expenses*	0	0	0	0	0	0	154000	0
Total	500000	389122	5800000	5676850	1100000	976269	5852837	4120002

9.9 Quality of Learning Resources (Hard/Soft) (5)

Total Marks 5.00

Institute Marks : 5.00

The primary digital library in Kanyakumari related to "NICHE" is the NICHE Central Digital Library at Noorul Islam Centre for Higher Education (NICHE), offering vast e-books, e-journals, databases, and automated systems (OPAC, circulation) for students and researchers, supporting academic excellence with Wi-Fi, quiet zones, and online access to global knowledge, aligning with NICHEs vision as a Centre of Excellence in higher education. Its an integrated part of the university, providing a modern, technology-driven learning environment. It goes beyond physical books, offering online access to resources without time or space limitations, a core benefit of digital libraries.

Key Features of NICHEs Digital Library

- Vast Digital Collection: Access to thousands of e-books, journals, and digital databases.
- Automated Operations: Fully automated system for acquisitions, circulation (renewal/reservation), and serial control, accessible via a web-based Public Access Catalogue (web-OPAC).
- Research Support: Provides Wi-Fi, networked computers, and assistance for literature searches, fostering research and innovation. An annual subscription of rupees 10 lakh is made for IEEE.
- Academic Focus: Aims to support higher education, advance knowledge, and contribute to scientific innovation, making it central to NICHEs academic mission.

9.10 E-Governance (5)

Total Marks 5.00

E-governance initiatives:

- NICHE has implemented a comprehensive ERP-based e-governance system that integrates administrative, academic, financial, examination, admission, and library operations. In administration, staff and student records, attendance, communication, notifications, and cashless transactions are fully supported through digital platforms, reducing paper usage and improving real-time access to information
- The Finance and Accounts section is e-governed using Tally ERP 9.0, enabling transparent financial management, digital salary disbursement, online fee collection through payment gateways, UPI, and card-based systems, along with SMS alerts for dues and salary credits
- The student admission process is fully automated, from online application and fee payment to entrance tests, hall tickets, merit list generation, and creation of register and roll numbers. Similarly, academic processes such as timetable generation, course management, attendance, internal assessments, electives, and fee status tracking are managed through the institutional automation system
- The examination system is completely digitized, covering internal assessment entry, hall ticket generation, mark statements, provisional certificates, and maintaining confidentiality and accuracy. The Central Library uses AutoLib Library Management Software supported by a private cloud infrastructure, enabling cataloguing, circulation, OPAC search, alerts, reminders, and access to digital resources.

Sustainable Practices:

- NICHE offers an essential ICT services including a state-of-the-art data center, hosting of servers including university and department websites, computing services, online teaching learning services, Internet Access, Email, e-Governance services, IT security, campus Wi-Fi, problem diagnostics and troubleshooting, etc. through a network comprising with 9 physical servers, 5 core switches, and 120 distribution switches. The Centre administers a 1Gbps link to National Knowledge Network (NKN) to provide smooth internet facility and access to online learning materials.
- A connected campus with ubiquitous access of internet is the backbone of ICT infrastructure. The entire University campus has a Fiber Optic LAN providing network to over 1100 PCs/ Workstations/Thin Clients/Laptops and Wi-Fi connections across the campus. Nine Wi-Fi towers are erected at different locations to create wireless hotspots and campus is 100% Wi-Fi enabled, providing secured access to all the students, faculty and other staff through a state-of-the art hardware firewall system.
- The computing facility is distributed across the University campus in various locations, such as AI Lab, iOS Lab, Language Lab, Robotics Lab, CAD CAM Lab, Cloud Computing Lab, Computer Engineering Lab, CFD Lab, Satellite Centre, Campus Network Facility, Admin Computer Centre, Cyber Security Centre, Automated Academic office, Automated Admission Office, Automated Exam Cell, and e-Governance Cell to tap inherent potential.
- The NICHE Computing Centre maintains the infrastructure and IT resources based on a well-defined, comprehensive IT policy. The policy describes the protection of information and information technology resources to assure the utility and availability of the resources to the user. The following are the salient features of the IT policy:
 - Policy statements are framed in line with the guidelines of the Government of India and the existing IT laws of the country.
 - The policy covers systems usage, Internet usage and all IT resources.
 - The policy enforces the use of proper authentication and authorization mechanisms.
 - The policy practices the usage of only legal and licensed software.
 - Data and information related aspects including content creation, ownership, transfer, usage, storage, backup, recovery, retention, disposal, security and privacy are given importance.
 - Privacy and security features are outlined. Guidelines for online examinations are provided.
 - Purchase and replacement procedure for IT equipment and accessories are defined. Policies on video surveillance are detailed.

- Provision is made for disciplinary and legal action in case of violation.
- A centralized Learning Management System (LMS) supports blended and online learning by providing facilities for uploading lecture materials, e-content, assignments, quizzes, and internal assessments, thereby enabling continuous interaction between faculty and students beyond classroom hours.
- Integrated software systems for admissions, student information, attendance, examinations, result processing, payroll, finance, and human resources. Online portals for students and faculty to access academic records, timetables, notices, and administrative services. Classrooms are equipped with LCD projectors, smart boards, audio-visual systems, and internet connectivity.

9.11 Initiatives and Implementation of Sustainable Development Goals (SDGs) (10)**Total Marks 10.00**

The institution actively promotes and implements the United Nations Sustainable Development Goals (SDGs) by integrating sustainability principles into academics, research, campus operations, and community outreach. Special emphasis is placed on green energy, waste management, water conservation, net-zero practices, quality education, reuse-recycle principles, and renewable energy adoption.

1. Green Energy and Net-Zero Initiatives

The institution is proud to have received the Green University Accreditation Certificate from Green Mentors for the period 2021–2023. The International Green University Award- 2022 is presented to Noorul Islam Centre for higher Education at Green School Conference 2022.

2. Solar Energy

A 10kW off-grid solar photovoltaic energy production system has been installed in marine hostel. It has been installed in the year 2014 by Aeon Renewable Energy Solution Private limited. It produces about 30 units per day and the generated power is used in Marine kitchen.

A 660W solar photovoltaic energy production system has been installed in the Allied Health Science (AHS) Department and the power generated is used for the lights and fans in the laboratories of AHS department.

3. Biogas Plant

A 6 cubic meter biogas plant has been constructed in gent's hostel. Food wastes from hostel and cow dung are used as feed materials. The biogas thus produced is also used as an alternate source of cooking fuel in gent's hostel.

4. Wind Energy

A 1.5kW wind mill has been installed in the AHS department. The street lights around the department are powered by the same.

The institution makes use of LED bulbs as a part of efficient energy saving techniques at various blocks including AC Auditorium.

5. Waste Management and Reuse-Recycle Practices

The institution follows a systematic waste management policy. Waste segregation (wet, dry, and e-waste) is practiced across the campus. Organic waste is composted, while e-waste is disposed of through authorized vendors. Awareness programs promote reuse and recycling and reduced single-use plastics.

6. Vermicomposer

A vermicomposer of size 3m x 3m x 2m has been installed near the marine block exclusively earmarked for organic solid waste management. The most commonly used species of earthworm (or composting worms) are red wigglers.

7. Liquid Waste Management

Sewage treatment plants (STPs) are installed in the ladies and gents' hostel.

8. Quality Education and SDG Integration

Supporting SDG 4 (Quality Education), sustainability and SDG concepts are integrated into the curriculum. Students are encouraged to undertake problem-based learning and interdisciplinary projects addressing real-world sustainability challenges.

POs and PSOs related to sustainability and quality Education

POs: PO7, PO8, PO12

PSOs: PSO3

The institution actively conducts outreach programs throughout the Bachelor degree programme.

Outreach and Community Engagement

Through NSS and extension programs, the institution conducts tree plantation drives, cleanliness campaigns, water conservation awareness programs, and renewable energy awareness camps in nearby community.

9.12 Innovative Educational Initiatives and Implementation (5)

Total Marks 5.00

- NICHE has fully put in place the Academic Bank of Credits (ABC) system. This system gives students more flexibility in their studies through easy credit transfer. Students can take subjects from other departments within the university, and the earned credits are automatically added to their main academic record. If students join NICHE from other universities, the credits they earned earlier from recognized institutions are accepted and included in their final certificates.
- NICHE promotes the Indian Knowledge System by offering the course “Heritage of Tamil” in the curriculum, which can be studied in English or Tamil, and emphasizes holistic development by integrating human values, ethics, social responsibility, and environmental consciousness through courses such as Environmental Science, Professional and Business Ethics.
- NICHE has well defined policy on equity which ensures that all students, faculty and staff members have equal opportunities for admission, employment and growth regardless of their gender, caste, religion, disability, or socio-economic background.
- NICHE ensures differently-abled, barrier free environment to differently-abled students and provide opportunities to them to access the benefits, rights and privilege of services. Ramps and rails are provided for easy access to various locations. Ramps are built with handle on both sides to suit for the need.





Fig. 9.12.1 Classrooms with ramps

9.13 Faculty Performance Appraisal and Development System (FPADS) (10)

Total Marks 10.00

The Faculty Performance Appraisal and Development System is implemented through a well-defined and systematic mechanism to ensure academic rigor, accountability, and quality enhancement.

Faculty members are required to complete 100% of the prescribed syllabus for each course, and the details of syllabus coverage are meticulously documented in the Record of Academic Work. These records are periodically verified by the Head of the Department (HOD) and reviewed by the Pro Vice-Chancellor (Academics) to ensure compliance with academic standards.

Faculty strictly adheres to the academic calendar and schedule prescribed by the university, which governs the conduct of classes, internal assessments, tutorials, seminars, and workshops. In addition to regular teaching, faculty members are encouraged to organize and participate in seminars, workshops, tutorial sessions, and other academic enrichment activities to enhance student learning outcomes.

The university strongly promotes a research-oriented culture by motivating faculty to apply for sponsored research projects from both Government and non-Government funding agencies. Faculty are also encouraged to contribute to scholarly advancement through patents, publications in SCI and Scopus indexed journals, and the publication of books and book chapters. All such academic and research contributions are systematically recorded in the university management system/website, and faculty members are required to submit documentary evidence for verification.

These verified academic, teaching, and research contributions form a key component of the Academic Performance Indicator (API) assessment and are carefully reviewed by the concerned committees. Outstanding and consistent contributions are duly recognized through the Faculty Appreciation Award, thereby reinforcing a culture of excellence, continuous improvement, and professional growth within the university.

Academic Performance Indicator (API)

The Academic Performance Indicator (API) is calculated annually to evaluate faculty performance in a systematic and transparent manner. The assessment is based on Teaching, Learning and Evaluation-related activities, Co-curricular and Extension activities, Professional Development-related activities, and Research, Publications, and Academic Contributions.

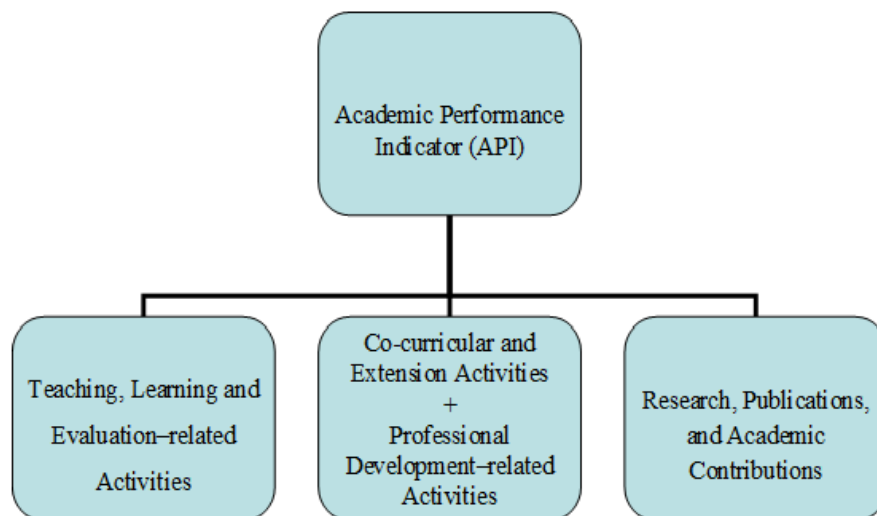


Fig. 9.13.1: Academic Performance Indicator (API)–Based Faculty Evaluation Framework

This comprehensive evaluation framework ensures objectivity and accountability in performance assessment, encourages effective teaching practices, promotes research and innovation, and motivates continuous professional development. The API system helps in identifying strengths and areas for improvement, supports career advancement and recognition, and aligns individual faculty performance with institutional goals and quality enhancement initiatives.



NICHE
KANYAKUMARI
GROWED TO BE UNIVERSITY

NOORUL ISLAM CENTRE FOR HIGHER EDUCATION
 ☎ Karamacoll - 629 180, Kanyakumari District, Tamil Nadu, India
 🌐 www.niuniv.com 📧 info@niuniv.com
 ☎ +91-9486856101, 04651-250566

PART A: ACADEMIC PERFORMANCE INDICATORS (APIs)
(To be filled by the TEACHING FACULTY/Equivalent cadres)

1. Name (in Block Letters) : Dr. S. MARIA CELESTIN VIGILA
2. Father's Name/Mother's Name : Mr. C. Soosai Antony
3. Department : IT Current Designation: Associate Professor
4. Date of Joining : 04 / 01 / 1999
5. Grade Pay : 9000 Date of Last Promotion: 18/09/2010
6. Date and Place of Birth: 09/07/1975 Sex: Male/Female
Madathattuvilai
7. Marital Status: Married/Unmarried Nationality: Indian
8. Address for correspondence (with Pincode):
7112/S, Park Road,
Ramanputhoor,
Nagercoil – 629 002.
9. Permanent Address (with Pincode):
7112/S, Park Road,
Ramanputhoor,
Nagercoil – 629 002.
10. Contact Numbers: 9442150033
11. E-Mail which you browse daily-in capitals: CELESLEON@YAHOO.COM

Summary of API Score for the Assessment Period: 2024-2025

S.No.	Type of activity	Details
1.	Teaching Learning, Evaluation for last year of assessment period (category I)	125
2.	Co-curricular, Extension and Profession for last year of assessment period (category II)	25
3.	Total of category I and II of last academic year of assessment period*	150
4.	Total average under category I and II*	150
5.	Research & Academic Contribution for assessment period (Category III)	225
6.	% Weightage of Category I+II	100
7.	% Weightage of Category III	100
8.	Total of 6 and 7 above	200
9.	Percentage Distribution of Weightage Points in the Expert Assessment (Total Weightage = 100. Min. Required for promotion is 50)	100

Dated: 27/06/2025

(Name & Signature)
(S. Maria Celestin Vigila)

* Teacher may score additional 10 points from either Category I or II to achieve minimum score required under category I + II

Notes: Please refer to instructions/Annual PBAS for calculating API score and filling up this form provided along with this application form.

Fig. 9.13.2: Academic Performance Indicator (API) Evaluation.

Student Feedback–Based Faculty Appraisal

A structured student feedback mechanism is followed to assess teaching effectiveness. Feedback collected during the semester is reviewed at the departmental level, and constructive suggestions are provided to faculty members for continuous improvement in teaching–learning practices.

ANNEX :07 01 00

NOORUL ISLAM CENTRE FOR HIGHER EDUCATION, KUMARACOIL.
STUDENT'S EVALUATION OF TEACHING STAFF
B.Tech Information Technology , VI Semester
Academic Year 2024-25(Even) - First Evaluation

<u>Subject Name</u>	<u>Staff Name</u>	No.in favor of	Credit	Marks
Full Stack Web Development(IT3216)	Dr.R.Mathusoothana.S.Kumar			
1. Knowledge of Teacher in the subject	Excellent	19	10	190
	Good	7	6	42
	Fair	0	3	0
	Poor	1	0	0
2. Clarity and understandability of teachers explanations	Excellent	17	10	170
	Good	9	6	54
	Fair	0	3	0
	Poor	1	0	0
3. Teachers willingness to help	Excellent	19	10	190
	Good	7	6	42
	Fair	0	3	0
	Poor	1	0	0
4. Regularity in engaging classes	Regular	26	10	260
	Irregular	1	0	0
5. Whether the Teacher dictates notes without explanation	Yes	6	0	0
	No	21	10	210
6. Teacher's ability to organize lectures.	Excellent	20	10	200
	Satisfactory	5	5	25
	Poor	2	0	0
7. Speed of presentation	Just right	21	10	210
	Too fast	5	2	10
	Too slow	1	2	2
8. Does the teacher encourage Questioning?	Yes	23	10	230
	No	4	0	0
9. Behavior of the teacher	Pleasant	22	10	220
	Indifferent	2	2	4
	Unpleasant	3	0	0
10. Use of Black board	Effective	12	10	120
	Rarely uses	8	3	24
	Not at all uses	7	0	0
11. Sincerity of the teacher	Sincere	24	10	240
	Not sincere	3	0	0
12. Norms of valuation of tests and assignments.	Too Strict	8	3	24
	Too liberal	4	3	12
	Just right	15	10	150
13. Promptness in valuing tests and assignments.	Quite prompt	24	10	240
	Not prompt	3	0	0
14. Overall teaching effectiveness of the teacher.	Excellent	15	10	150
	Good	10	6	60
	Fair	1	3	3
	Poor	1	0	0
Number of Students Evaluated - 27 out of 30				
		3082	$\times 100 = 81.53\%$	
		14x10x27		

Staff in-charge: Jayalaxmi M, 28/2/25

HOD: Dr. R. Mathu Soothana S. Kumar, Head Dept. of Information Technology, Noorul Islam Centre for Higher Education, Kumaracoil, Thuckalay - 629 180. 28.2.25

Fig. 9.13.3 Assessing Teaching Effectiveness based on Student Feedback

Faculty Appreciation Award

Faculty members are recognized through an Appreciation Award for their significant contributions in research, innovation, and institutional advancement. The award is based on evaluation by a committee as per institutional criteria.



Fig. 9.13.4: Dr. R. Mathusoothana S Kumar, received the Certificate of Appreciation for his contribution in Research and Institutional Advancement

The structured faculty appraisal and recognition mechanisms adopted by the institution ensure a transparent, objective, and holistic evaluation of faculty performance. These practices collectively motivate faculty members, support career progression, and ensure alignment of individual performance with institutional goals, thereby contributing significantly to overall academic quality and institutional excellence.

9.14 Outreach Activities (5)

Total Marks 5.00

EXTENSION ACTIVITY - CLEANLINESS DRIVE IN THIRPARAPPU

To promote environmental cleanliness, hygiene, and social responsibility among students, an extension activity was conducted with a team of enthusiastic students and faculty members for a cleanliness drive in Thirparappu on the 15th of May, 2025. 26 students and 4 faculty members visited Thirparappu and actively participated in cleaning the surrounding areas, especially near the waterfall, roadsides, and public gathering spots. The activity included the collection of waste, sweeping of littered areas.



Fig. 9.14.1 Students in the Cleanliness Drive along with the officers



Fig. 9.14.2 Collecting the Weeds

Annexure I

(A) PROGRAM OUTCOME (POs)

Engineering Graduates will be able to:

PO1: Engineering Knowledge: Apply knowledge of mathematics, natural science, computing, engineering fundamentals and an engineering specialization as specified in WK1 to WK4 respectively to develop to the solution of complex engineering problems.

PO2: Problem Analysis: Identify, formulate, review research literature and analyze complex engineering problems reaching substantiated conclusions with consideration for sustainable development. (WK1 to WK4)

PO3: Design/Development of Solutions: Design creative solutions for complex engineering problems and design/develop systems/components/processes to meet identified needs with consideration for the public health and safety, whole-life cost, net zero carbon, culture, society and environment as required. (WK5)

PO4: Conduct Investigations of Complex Problems: Conduct investigations of complex engineering problems using research-based knowledge including design of experiments, modelling, analysis & interpretation of data to provide valid conclusions. (WK8).

PO5: Engineering Tool Usage: Create, select and apply appropriate techniques, resources and modern engineering & IT tools, including prediction and modelling recognizing their limitations to solve complex engineering problems. (WK2 and WK6)

PO6: The Engineer and The World: Analyze and evaluate societal and environmental aspects while solving complex engineering problems for its impact on sustainability with reference to economy, health, safety, legal framework, culture and environment. (WK1, WK5, and WK7).

PO7: Ethics: Apply ethical principles and commit to professional ethics, human values, diversity and inclusion; adhere to national & international laws. (WK9)

PO8: Individual and Collaborative Team work: Function effectively as an individual, and as a member or leader in diverse/multi-disciplinary teams.

PO9: Communication: Communicate effectively and inclusively within the engineering community and society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations considering cultural, language, and learning differences

PO10: Project Management and Finance: Apply knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, and to manage projects and in multidisciplinary environments.

PO11: Life-Long Learning: Recognize the need for, and have the preparation and ability for i) independent and life-long learning ii) adaptability to new and emerging technologies and iii) critical thinking in the broadest context of technological change. (WK8)

(B) PROGRAM SPECIFIC OUTCOME (PSOs)

Program should specify 2-4 program specific outcomes.

PSO1	To apply the knowledge of basic sciences, engineering and information technology to provide solutions for complex Engineering problems.
PSO2	To apply technical knowledge and use of modern tools for solving problems in web development, network and cloud management, cyber security and forensics, artificial intelligence, machine learning and cryptography.
PSO3	Comprehend the lifelong learning on technological advancement and practice professional ethics in concern for social well-being.

Declaration

The head of the institution needs to make a declaration as per the format given -

- I undertake that, the institution is well aware about the provisions in the NBA's accreditation manual concerned for this application, rules, regulations, notifications and NBA expert visit guidelines inforce as on date and the institutes hall fully abide by them.
- It is submitted that information provided in this Self Assessment Report is factually correct.
- I understand and agree that an appropriate disciplinary action against the Institute willbe initiated by the NBA. In case, any false statement/information is observed during pre-visit, visit, postvisit and subsequent to grant of accreditation.

Head of the Institute

Name : Dr. Tessy Thomas

Designation : Vice Chancellor

Signature :



Seal of The Institution :



Place : Kumaracoil

Date : 10-02-2026 20:27:28