

# FOR 1<sup>st</sup> CYCLE OF ACCREDITATION

# LOYOLA INSTITUTE OF TECHNOLOGY

LOYOLA INSTITUTE OF TECHNOLOGY, PALANCHUR, MEVALURKUPPAM B VILLAGE, NAZARATHPET POST 600123 www.lit.edu.in

#### Submitted To

# NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

(Draft)

# 1. EXECUTIVE SUMMARY

#### 1.1 INTRODUCTION

Loyola Institute of Technology (LIT), approved by AICTE and affiliated to Anna University Chennai is a premier institution established in 2003, run by the sisters of the society of daughters of Mary Immaculate & collaborators. Located in Palanchur along the vibrant Industrial belt on Chennai-Bangalore Highway, LIT stands as a beacon of technical education excellence in the region. Established with a firm commitment to academic rigor, holistic development, and ethical values. LIT offers a diverse array of 7 B.E/B.Tech undergraduate programs across various engineering disciplines and one post graduate programme MBA, providing students with a comprehensive educational experience grounded in theoretical knowledge and practical skills with emphasis on reskilling and Up skilling.

The Degree courses include B.Tech - Information Technology, Artificial Intelligence & Data Science. B.E -Computer Science & Engineering, Computer Science & Engineering (Cyber Security), Electrical & Electronics Engineering, Mechanical Engineering, Electronics & Communication Engineering. PG - Master of Business Administration. These programs are offered in Full Time mode. These programs are delivered by highly experienced faculty.

Beyond academics, LIT places great emphasis on extracurricular and co-curricular activities, encouraging students to explore their interests, ensure gender equity, develop leadership skills, and engage in community service initiatives. Through sports, cultural events, and entrepreneurship programs, students are encouraged to hone their talents and broaden their horizons. At LIT, student welfare and success are paramount. The institution offers comprehensive support services, including counseling, career guidance, higher education counselling and placement assistance, to help students navigate their academic and professional journeys with confidence and clarity.

As a dynamic hub of innovation and learning, Loyola institution of Technology remains steadfast in its mission to empower students to realize their full potential, contribute meaningfully to society, and lead lives of purpose and impact. For this purpose is established the Loyola Technology Business Incubator HI/BI MSME host Institution Business Incubator of MSME. With a strong commitment to excellence and service, LIT continues to shape the future of engineering education in India and beyond.

#### Vision

To be a world class Institution in creating and disseminating knowledge through a contemporary and rigorous educational experience that facilitates our students to be technologically competent and ethically strong to serve the society for the betterment of mankind.

#### Mission

We, At Loyola Institute of Technology dedicate and commit our self to

• Achieve, Sustain and Foster unmatched excellence in Technical Education

- Provide an Intellectually Inspiring Environment for Creative Learning and Research
- Collaborate with Industry and Research and Development Organization to promote Innovative Research, Employability and Entrepreneurship for nation building
- Inculcate High Regard for ethical Practices and Understanding Human values.

# 1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

#### **Institutional Strength**

- Strategic location on the Chennai Bangalore highway provides easy accessibility and connectivity for students and faculty.
- Infrastructure and eco-friendly campus
- Programmes structured to cater to Industrial needs.
- Skill development centre and value addition.
- Proximity to major industrial hubs offers opportunities for industry collaboration, internships, and placements.
- Access to urban amenities and resources enriches the overall student experience and facilitates academic and extracurricular activities.
- Qualified and experienced faculty with wide range of engineering and basic science domains.
- Advanced teaching-learning process for curriculum enrichment.
- Good Campus Placement
- Encouragement for extra and co-curricular activities.

#### **Institutional Weakness**

- 1. High competition from other autonomous educational institutions in the vicinity may pose challenges in student recruitment.
- 2. Faculty attrition.
- 3. Less number of students qualifying in competitive exams and less research publications.

#### **Institutional Opportunity**

- 1. Collaboration with nearby industries for research, internships, and skill development programs.
- 2. Expansion of academic and extracurricular initiatives to leverage the advantages of the location and attract students from diverse backgrounds.
- 3. Partnering with local communities for social outreach and experiential learning opportunities.

Exposing students to hands-on training as per employer requirement.

Strengthening placement training, self-learning and career advancement activities to enhance the knowledge, skill and attitude level of students.

#### **Institutional Challenge**

- 1. Balancing urban development pressures with environmental sustainability concerns.
- 2. Suburban and rural students with less English competency.
- 3. Difficulty in enrolling for NPTEL examinations due to economic condition of students.
- 4. Low student enrolment in certain branches of engineering.

#### 1.3 CRITERIA WISE SUMMARY

#### **Curricular Aspects**

Affiliated to Anna University, Chennai, the college executes the CBCS curriculum prepared by the university with its own methods of OBE. The curriculum is updated regularly to align with industry standards and technological advancements. It includes courses which integrate crosscutting issues relevant to Professional Ethics, Human Values, Environment and Sustainability. To augment skills the college conducts value addition certificate programmes. 57.09 % of students have undergone 33 of these courses.

In line with university academic calender, institution academic calendar and department calendar ,events are prepared for effective implementation of curriculum and OBE. To check effectiveness and initiate further improvement, Department Advisory Board (DAC) & Program Assessment Committee (PAC) are constituted as per the guidelines given by Internal Quality Assurance Cell (IQAC) of the institution.

Faculty members implement innovative teaching methodologies for implementation of teaching-learning process through use of ICT. The institution ensures content beyond the university prescribed syllabus is delivered. Skill development centre with industry collaborated labs enhance the learning experience.

Project work is mandatory and Students of all years also undergo internship. 49.39 % have undertaken project work/fieldwork/internships. The innovation culture in the campus results in several publications & patents. The EDC cell and Incubator hones the business skills of students. Mentoring system enables holistic growth of students. Institution obtains feedback on the curriculum, department and institution from the stakeholders parents, employers, alumni, students & staff which is analyzed and actions are planned which serve as input for the continuous improvement in teaching-learning process. The institution boasts of alumni well linked with the

college.

#### **Teaching-learning and Evaluation**

LIT adopts a student-centric approach, focusing on individualized attention and personalized learning experiences.

63.18% Students is the enrolment rate admitted by the Admission cell as per the norms of the Tamilnadu government. 66.21 % seats filled in reservation category. Interactive teaching methods, incorporating modern pedagogical techniques enhance student engagement and learning outcomes. 79 Faculty members utilize lectures, interactive sessions, group discussions, case studies, blended learning and multimedia tools to engage students effectively. Teacher student ratio is 1:14.43, and 100% of the faculty work full time. 20 Ph.D's , 2 with SET/NET ,14 pursuing Ph.D.

Transparent Continuous evaluation methods ensure student progress is monitored effectively. a robust system of continuous evaluation to monitor student progress and learning outcomes results in 89.06 % pass rate. Remedial classes and tutorials are arranged to help students overcome learning challenges and improve their academic performance.

Assessment methods include quizzes, assignments, presentations, projects, and examinations, ensuring comprehensive evaluation of students' knowledge and skills They undergo regular professional development programs to enhance their teaching skills, stay updated with emerging trends, and incorporate industry-relevant content into their curriculum.

Course Outcome (CO) are mapped to Program Outcomes PO attainment levels of POs and PSOs of all the courses of a program are computed. To bridge the curriculum gap and to address all the POs, site/industry visits, technical talks, seminars, workshops etc. are organized by all the Departments. The desired outcomes are attained.

Feedback mechanisms, including course end evaluations, Exit surveys, and student feedbacks enable the institution to identify areas for improvement and implement corrective measures.

#### Research, Innovations and Extension

Loyola Institute of Technology fosters a culture of research and innovation among faculty and students. It encourages consultancy projects and industry collaborations, contributing to the advancement of knowledge and technology transfer Rs15,87,500 worth consultancy work was done.

Students are involved in research projects, competitions, publications, fostering critical thinking, problem-solving skills, and innovation. Rs.7500 was received for a student project from Tamilnadu State Council for Science & Technology.

Entrepreneur development cell encourages the development of novel solutions and technologies with commercial potential. LIT is one of the 100 spoke cells of Anna University for EDC activities.

LIT supports innovation through the incubators, and startup initiatives, MSME Host Institution Business

Incubator was sanctioned in the year 2020. LIT is a resource centre for National cyber safety and security standards council and extends its expertise and resources to the community through outreach programs. MSME resource center for six sigma functions in the campus.

Industry-academia partnerships enhance the relevance of research ,innovation, and addressing industry challenges. There are industry collaborated labs in AI with IBM, IOT with IBM, RPA with Blue prism, Fire safety and solar power with TATTI, CCNA with CISCO, industrial automation with CDCE and a lab in mobile technology. Faculty act as resource persons in the training of company executives for Hyundai Motors, Schneider etc.

LIT encourages faculty and students to disseminate research findings through scholarly publications, patents, conferences, and workshops. 56 programmes were conducted in IPR, research methodology and Entrepreneurship. 13 text books, 48 conference publications, 54 journal publications have been made. 48 patents Published 21 patents were granted.56 outreach programmes have been conducted and 28 MOU's are in place for various collaborative activities. 45 activities conducted. LIT has 3.5 rating in IIC activities of MOE Govt of India.

#### **Infrastructure and Learning Resources**

Loyola Institute of Technology (LIT) established in a lush 10.42 acre campus, with built up area of 25876.54 sq.metre of modern infrastructure facilities that provide students with a conducive learning environment. The campus features classrooms, smart classrooms, equipped with audio - visual aids and smart boards, facilitating interactive teaching and learning experiences. There are 48 class rooms, 8 seminar halls, 3 conference rooms and 2 auditoriums, AC Audi 600 capacity, Non AC audi 1500 capacity. LIT offers well-equipped laboratories with the latest equipment and instrumentation across various engineering disciplines.

The institution houses a 1100sqm library stocked with 29973 volumes of books. Journals, periodicals, and digital resources like DELNET, NDL, TNDL & IEI Journals. LIT provides robust digital infrastructure, with 460 computers, including 100 Mbps high-speed internet connectivity, computer labs, and e-learning platforms There are 2 central computer centres and every department has its own computer labs.

The campus offers recreational and sports facilities, including indoor and outdoor sports arenas, gymnasiums, and recreational spaces. The Institution has accomplished sports persons. LIT provides comfortable and secure hostel accommodation for students, with facilities for dining, recreation, and study. 30.67 % is spent on infrastructure augmentation. An average of about 34.18 % of income is spent on maintenance. The resources mobilized are utilized to maximum benefit. Financial audit is done both internally and externally

#### **Student Support and Progression**

Loyola Institute of Technology (LIT) prioritizes the holistic development and well-being of its students by offering comprehensive support services. 85.17 % of students benefit from scholarships and free ships. The various support systems offered include academic counseling, personal guidance, and career development programs aimed at nurturing students' academic, personal, and professional growth. 17 programmes have been arranged in soft skills, communication skills, life skills and ICT skills.

LIT provides academic counseling and mentorship to assist students in navigating their academic journey

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effectively. The various types of career counseling programmes and competitive examination counseling resulted in 75.26% of students being benefited. A transparent grievance addressal mechanism exists for timely support. Committees like women redressal, Grievance redrassal and anti ragging have been formed. The campus is safe and secure for the students and is known for its discipline.

The institute offers robust Higher education programs and placement services to prepare students for successful transition into the workforce. 85.28 % of students have benifited from the same. This enhances students' employability and job readiness. Beyond academics various clubs function in the campus like NSS,YRC, Leo, Rotract, Green club, Code giants. Cultural and sports activities are encouraged. 42 students have outstanding performance awards in national and international programmes. 72 sports and 86 cultural programmes have been conducted for the students.

A registered alumni association is available .LIT maintains strong connections with its alumni network, providing opportunities for alumni to mentor current students, share career insights, and contribute to the institute's growth and development. Alumni interactions serve as valuable resources for students, offering guidance, support, and networking opportunities

#### Governance, Leadership and Management

Loyola Institute of Technology (LIT) operates under a framework of transparent governance, characterized by clear policies, procedures, and decentralized yet unified decision-making processes. The institution upholds principles of accountability, fairness, and integrity in its governance practices, ensuring the efficient and effective management of resources. The institute engages in strategic planning processes to set clear goals, objectives, and priorities aligned with its vision and mission. Strategic planning exercises involve stakeholders from across the institution, fostering consensus-building and collective ownership of institutional goals and initiatives.

The HR policies are clearly defined. CAMU is used as the ERP tool at LIT. The academic and administrative process is managed through CAMU.

LIT emphasizes quality assurance mechanisms to monitor and evaluate institutional performance across various dimensions. The IQAC cell of the institution conducts External, internal audits, reviews, and assessments to ensure compliance with regulatory standards, accreditation requirements, and best practices in higher education. The performace of faculty is appraised through student feedback, and self appraisal. The institution values stakeholder feedback and participation, seeking input on key decisions, policies, and initiatives to enhance stakeholder satisfaction and institutional effectiveness. LIT specializes in making data-driven decisions to drive improvement and achieve strategic objectives.

The institution invests in the professional development of its faculty and staff through training programs, workshops, conferences, and research opportunities.68% faculty have benefited trough FDP's and 52 % non teaching staff through professional development programmes (PDP). LIT has an NIRF innovation ranking in the band 150 - 300.

#### **Institutional Values and Best Practices**

Loyola Institute of Technology (LIT) places a strong emphasis on upholding ethical values and principles in all

aspects of its operations. To ensure gender equity beginning with gender sensitization programmes efforts have been taken to enhance facilities for women in campus. 11 gender sensitization and activity programmes have been shown as sample. Sanitary pad vending machine and incinerators are present.

The institution encourages students, faculty, and staff to participate in community service projects, environmental initiatives, and social justice advocacy efforts, making a positive impact beyond the campus boundaries. Onam, Christmas, pongal, power of vote, green initiatives, health programmes, days of national and international importance are celebrated to ensure harmony.

Our campus is a green plastic free campus. Alternative sources of energy is considered environmentally friendly because they produce little to no greenhouse gas emissions or other pollutants .The campus has solar lights with sensors, LED bulbs are used extensively, 20KW Solar panels rae used for electricity supply. Solar dustbins serve dual purpose. We have some sign boards like speed limit, speed breaker sound horn, etc., which gives information, guiding students.

Waste management is executed through separation of waste using color coded waste bins. E waste is removed through MOU with an agency. Food waste is also fed to the swines. A bio gas plant converts waste into gas it convers 10 to 15 kg food waste per day. Water management is done using borewells, rainharvesting pits. 500 LPH RO water plant is present. Several water coolers and dispensers are maintained at vantage points. Green audit and environment audit is conducted trough external agencies and awards have been secured. 13 environmental programmes beyond the campus have been shown as samples.

Fire extinguishers are present all over the campus. Barrier free environment is provided through walk way, Ramp, Lift and special restrooms for differently enabled.

The pride of our institution is Being a pioneer in AI in association with IBM, our Skill development centre for students and society through industry collaboration and being a resource centre of the National cyber security research council

# 2. PROFILE

# 2.1 BASIC INFORMATION

Name and Address of the Colle	ge
Name	LOYOLA INSTITUTE OF TECHNOLOGY
Address	LOYOLA INSTITUTE OF TECHNOLOGY, PALANCHUR, MEVALURKUPPAM B VILLAGE, NAZARATHPET POST
City	KANCHIPURAM
State	Tamil Nadu
Pin	600123
Website	www.lit.edu.in

Contacts for Communication									
Designation	Name	Telephone with STD Code	Mobile	Fax	Email				
Principal	SUJATHA JAMUNA ANAND	044-26811541	9840696274	044-2681154	principal@lit.edu.in				
IQAC / CIQA coordinator	SENTHILKU MAR R	044-26810252	7904219703	044-2681154	senthilkumar.r_cse @lit.edu.in				

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution						
By Gender	Co-education					
By Shift	Regular					

Recognized Minority institution							
If it is a recognized minroity institution	Yes 2.1.2-Minority-Status-Letter.pdf						
If Yes, Specify minority status							
Religious	CHRISTIAN MINORITY						
Linguistic							
Any Other							

## **Establishment Details**

State	University name	Document
Tamil Nadu	Anna University	View Document

Details of UGC recognition					
<b>Under Section</b>	Date	View Document			
2f of UGC	01-03-2018	View Document			
12B of UGC	01-03-2018	<u>View Document</u>			

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)										
Statutory Regulatory Authority	Recognition/Appr oval details Instit ution/Department programme	Day,Month and year(dd-mm- yyyy)	Validity in months	Remarks						
AICTE										

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	No

Location and Area of Campus									
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.					
Main campus area	LOYOLA INSTITUTE OF TECHNOLOGY, PALANCHUR, MEVALURKUPPAM B VILLAGE, NAZARATHPET POST	Rural	10.42	25876.54					

# 2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)									
Programme Level	Name of Pro gramme/Co urse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted			
UG	BTech,Artifi cial Intelligence And Data Science,	48	HSC	English	60	60			
UG	BE,Compute r Science And Engineering,	48	HSC	English	60	57			
UG	BE,Compute 4 r Science And Enginee ring,Cyber		r Science And Enginee		HSC	English	60	48	
UG	BE,Electrical And Electronics Engineering,	48	HSC	English	30	16			
UG	BE,Electroni cs And Com munication Engineering,	48	HSC	English	60	59			
UG	BTech,Infor mation Technology,	48	HSC	English	60	55			
UG	BE,Mechanic al Engineering,	48	HSC	English	30	13			
PG	MBA,Master Of Business Administrati on,	24	UG	English	60	60			

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Profe	Professor				Associate Professor			Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	10		3			66						
Recruited	7	3	0	10	2	1	0	3	36	30	0	66
Yet to Recruit	0				0			0				
Sanctioned by the Management/Soci ety or Other Authorized Bodies	0			0				0				
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0			0			0					

	Non-Teaching Staff							
	Male	Female	Others	Total				
Sanctioned by the UGC /University State Government				19				
Recruited	9	10	0	19				
Yet to Recruit				0				
Sanctioned by the Management/Society or Other Authorized Bodies				0				
Recruited	0	0	0	0				
Yet to Recruit				0				

Technical Staff							
	Male	Female	Others	Total			
Sanctioned by the UGC /University State Government				9			
Recruited	4	5	0	9			
Yet to Recruit				0			
Sanctioned by the Management/Society or Other Authorized Bodies				0			
Recruited	0	0	0	0			
Yet to Recruit				0			

# Qualification Details of the Teaching Staff

	Permanent Teachers											
Highest Professor Qualificatio n		Professor		Associ	iate Profes	sor	Assist	ant Profes	sor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total		
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0		
Ph.D.	7	3	0	2	1	0	4	3	0	20		
M.Phil.	0	0	0	0	0	0	4	4	0	8		
PG	0	0	0	0	0	0	30	23	0	53		
UG	0	0	0	0	0	0	0	0	0	0		

	Temporary Teachers											
Highest Qualificatio n	Professor		Associ	iate Profes	sor	Assist	ant Profes	sor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total		
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0		
Ph.D.	0	0	0	0	0	0	0	0	0	0		
M.Phil.	0	0	0	0	0	0	0	0	0	0		
PG	0	0	0	0	0	0	0	0	0	0		
UG	0	0	0	0	0	0	0	0	0	0		

	Part Time Teachers											
Highest Qualificatio n	Professor		Associ	iate Profes	sor	Assist	ant Profes	sor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total		
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0		
Ph.D.	0	0	0	0	0	0	0	0	0	0		
M.Phil.	0	0	0	0	0	0	0	0	0	0		
PG	0	0	0	0	0	0	0	0	0	0		
UG	0	0	0	0	0	0	0	0	0	0		

Details of Visting/Guest Faculties				
Number of Visiting/Guest Faculty	Male	Female	Others	Total
engaged with the college?	0	0	0	0

Provide the Following Details of Students Enrolled in the College During the Current Academic Year

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	183	17	0	0	200
	Female	102	7	0	0	109
	Others	0	0	0	0	0
PG	Male	19	6	0	0	25
	Female	34	1	0	0	35
	Others	0	0	0	0	0

Provide the Following Years	ng Details of Studen	ts admitted to	o the College Du	ıring the last fo	ur Academic
Category		Year 1	Year 2	Year 3	Year 4
SC	Male	47	47	39	49
	Female	39	34	15	26
	Others	0	0	0	0
ST	Male	0	3	0	0
	Female	0	0	2	0
	Others	0	0	0	0
OBC	Male	136	119	87	164
	Female	60	56	47	76
	Others	0	0	0	0
General	Male	9	4	11	2
	Female	2	2	4	0
	Others	0	0	0	0
Others	Male	16	30	19	77
	Female	5	10	9	21
	Others	0	0	0	0
Total	,	314	305	233	415

# Institutional preparedness for NEP

#### 1. Multidisciplinary/interdisciplinary:

• The UG and PG programmes of Loyola institute of technology, are multidisciplinary. The courses are classified as core, professional elective, open elective, mandatory courses, Skill based and value based making it viable for students to choose multidisciplinary subjects. Through experimental learning in the form of field visits, study tour, internship and visits to neighbouring villages and Activity students have gained knowledge on social issues and promote projects with solutions to social issues. • Students are actively engaged in imparting community and social connect to the society thus improving the personality, team work and leadership skills of students providing holistic development. • The programmes offered in various streams fall under the Choice Based Credit System (CBCS). UG and PG programs from the year 2021. Where each course has its prescribed credits. As per the latest regulations, students can acquire a minor degree in AI & DS, Cyber Security, Data Science, IOT, Innovation and Entrepreneurship etc. by securing 18 credits. • The regulations of the affiliating university through R2021 offer multiple entry and exit at the end of 1st, 2nd, 3rd and 4th year of undergraduate education. • Further the institution a good practice of the institution to promote Multidisciplinary / interdisciplinary approach in view of NEP 2020 is that our staff were made to participate in NEP promotion programmes like FDP and online seminars so that they can inturn guide the students. • In line with the policy of NEP skilling has been implemented in accordance with NSQF Upskilling and reskilling with its Skill development centre having Industry collaborated labs makes it possible to engage in more multidisciplinary research endeavors to find solutions to society's most pressing issues and challenges. Faculty work with students to participate in smart india hackathons. Our team has participated at Jaipur, Chennai and Kanpur.

#### 2. Academic bank of credits (ABC):

• As LIT is affiliated to Anna University, AU in its regulations has implemented ABC policy for UG and PG students. As per the regulations, a student can be awarded with BE (Honors) degree if he/she has minimum 8.5 CGPA up to 4th semester and before the completion of the program, acquires 18 credits through .The Nan mudalvan courses provides an opportunity to earn credits as per choice of students.
• The regulations of the affiliating university through

R2021 offer multiple entry and exit at the end of 1st, 2nd, 3rd and 4th year of undergraduate education. • The institution has a higher education cell to promote International education in different countries. Seminars are offered periodically. Students have been encouraged to take international Training to learn trends in technology of other nations. Our students have travelled to Singapore and Thailand and interacted with 3 universities besides online webminars with US,UK etc. • Faculty are encouraged to make video lectures and animated presentations for new pedagogical approaches within the approved framework. Text books have been published by many of our faculty. They prepare reading material, assignments, and assessments to enhance the capability of the students. Content beyond syllabus is also taught to keep them abrest on industrial and social expectations. • The institution is a nodal centre for NPTEL courses. Through Online courses offered by NPTEL- MOOCs platform -SWAYAM. Students are encouraged and motivated to take up NPTEL online courses to enhance their self-learning ability and gain knowledge on latest technological developments in their domains and earn credits. Students are also taking other online courses offered by government and non government organizations. • NAD ids have been created.

#### 3. Skill development:

• Soft skill development classes are arranged by the skill development team from year 1 inviting external experts. The college has been recently sanctioned to be a PMKVY skill development Centre. • The Institute has made numerous MOU with leading professional bodies / training Centre / industries. Through these MOU many activities such as industrial/site visits, technical talks, workshops, hands-on-training, internship are conducted to enhance the skill level of students. • The curriculum through NAN MUDHALVAN promotes skill based training with credits. • A Skill Development Centre with industry collaborated Labs has been established in which Industry collaborated labs in AI, IOT, Industrial fire safety, Mobile technology, solar energy, robotic process automation have been established. The Centre helps the students to gain the required competencies and the confidence to face realtime situations in the corporate world. It also helps in bringing cultural change in terms of professionalism

in their approach and thinking • Through the student induction programme (SIP), technical talks on universal human values (UHV) and professional ethics are delivered by the experts to build the value of education among students. These promote love, peace and dharma. Citizen ship values is promoted by observing days like independence, republic day, and press day and by conducting voters literacy programme. • The NSS, YRC registration is mandatory in the curriculum. LEO, ROTARY, GREEN, DRAMUDA clubs promote social welfare programs involving them with social issues and solutions. • Life skill programmes like yoga, health & hygiene are organized through experts. • Our institution also encourages to do "AICTE KARMA" which strategically planned skill initiatives to create skilled and certified workforce by 10 courses, who not only contribute towards the growth of India but also drive the country into becoming the global skills capital. • Our experienced faculty members give seminars on OBE to the students. Our institution also encourages the students to use the assessment "AICTE PARAKH". The main goal is to ensure the quality of teaching and research in these institutions and promote excellence in technical education.

- 4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):
- As the institute adheres to the framework of the AU curriculum, the Indian knowledge system is integrated with the curriculum as UG students' study Tamil / Professional English in first year as mandatory credit courses. Interactive learning activities that promote active engagement and participation among students. Incorporate a variety of activities such as group discussions, role-plays, games, storytelling, and multimedia presentations to reinforce learning and make the lessons enjoyable. • To identify the creative talents of students, the Institute has set up a student welfare council which conducts various cultural events viz. 'ethnic day', 'Tech Bazar' etc. every year. Various cultural events and competitions such as characters of Indian mythology, Indian carnival, classical music/songs, classical dance, rangoli, face painting, music instruments etc. are conducted so that students can embrace the Indian culture and tradition. • The Institute also celebrates Independence Day every year on 15th of August to remember the freedom we got from the Britishers and the freedom fighters who

sacrificed their lives for our freedom. • Our college Physical director has organized Silambam class for 2 years and they went training for 1 week for another college. In our institution to promote our Tamil culture theme, we arranged "Villupaattu" program for the students. To show the women power, our college girls have participated and won 1st place in "Women's Kabaddi", with guidance from the Physical director. Our students have won "Junior State Level Target ball Championship", in the SIMATS Sports Complex. • Faculty have attended online programmes on Indian Knowledge system.

5. Focus on Outcome based education (OBE):

i) Institution Initiatives Outcome Based Education (OBE) which is a student centric instruction with a clear statement on what knowledge, skills and attitudes the Graduate Engineer has to demonstrate as having acquired on successful completion of a 4-year program of study. As an initiative towards implementing OBE, the Institute has adopted OBE strategies and techniques in teaching-learning process from 2018. Also, the institution has framed its vision and mission accordingly. ii) Institution Efforts The vision and Mission of the departments are framed in line with the Institute's Vision and Mission. Program Educational Objectives (PEO) and Program Specific Outcomes (PSO) are also framed by every department to achieve its vision and mission. Course Outcome (CO) statements are framed for every course and are mapped to 12 Program Outcomes (POs) given by NBA/Washington accord. Based on formative and summative assessments, the set target levels and set attainment levels for a program, attainment levels of PO and PSO of all the courses of a program are computed. To bridge the curriculum gap and to address all the POs, site/industry visits, technical talks, seminars, workshops etc. are conducted by every Department. To check the effectiveness of teaching-learning process and to take necessary actions for further improvement, at the department level, Department Advisory Board, Program Assessment Committee and Department Quality Assurance Cell are constituted as per the guidelines given by Internal Quality Assurance Cell (IQAC) of the Institute. Our staffs and experienced faculty gave seminar on OBE to the students. Good practices of the institution pertaining to the Outcome based education (OBE) in view of NEP 2020. The

main objective of NEP 2020 is to prepare the graduates with skills that make them industry ready when they complete their education. In this view our institution also encourages to do "AICTE KARMA" which strategically plants skills among the students to create skilled and certified workforce by 10 courses, who not only contribute towards the growth of India but also drive the country into becoming the global skills capital. Students are taught to use AICTE PARAKH to assess the competence in subjects.

#### 6. Distance education/online education:

• As per the regulations, a student can be awarded with BE (Honors) degree if he/she has minimum 8.5 CGPA up to 4th semester and before the completion of the program, acquires 18 credits through online courses offered by NPTEL, MOOCs platform -SWAYAM. PG students are supposed to study 2 NPTEL courses in the first year to acquire the mentioned credits • Development and use of technological tools for teaching learning activities. Students are also encouraged and motivated to take up NPTEL online courses to enhance their selflearning ability and gain knowledge on latest technological trends. Students are also motivated to watch KALVI TV which is a group of DTH channels devoted to the telecasting of high-quality educational programme across the length and breadth of the country on a 24X7 basis. During the pandemic, the Institute has created various online platforms for smooth conduction of teaching and learning process. • Virtual labs of MHRD is used. • Online quizzes, Webinars by experts are conducted and blended mode of classes is encouraged. • Students are encouraged to complete as many online certifications as possible. NPTEL, Certifications under AICTE KARMA, Future skills prime are common.

#### **Institutional Initiatives for Electoral Literacy**

1. Whether Electoral Literacy Club (ELC) has been set up in the College?

The Electoral literacy club of Loyola institute of technology was formed to develop a culture of electoral participation and maximize the informed and ethical voting and follow the principle 'Myvote counts' and Every Vote Should Register'. The club will have staff guiding with students as its members. One can become a member by registering

	herself/himself at the beginning of the academic year.
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?	Our faculty Dr.Balaji (HOD MECHANICAL Engg) and Mr.Rajendran Asst Prof Science & Humanities)have the responsibility to impart the principles of democratic engagement and active citizenship. The other members include Principal 3 teaching faculty Co coordinators Ten student representatives from various departments.
3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.	Awareness campaigns to improve students' understanding of the country's Constitution are conducted. Furthermore, it places a high priority on encouraging moral voting practices by planning campaigns that emphasize how important it is to vote with knowledge. Seminars were held for all first year students as they are 18 years of age. Our student ambassadors promoted electoral literacy to our service staff. Events and activities have been conducted to encourage voting practice.
4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.	Mini project on improvement in voting machine. The NSS co ordinator encourages our NSS volunteers to serve as volunteers in the nearby panchayat during election.
5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.	Student projects have been encouraged in surveys among first year on voting practice.

# **Extended Profile**

#### 1 Students

#### 1.1

#### Number of students year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
1140	1184	1328	1467	1586

File Description	Document
Upload Supporting Document	<u>View Document</u>
Institutional data in prescribed format	View Document

# 2 Teachers

# 2.1

#### Number of teaching staff / full time teachers during the last five years (Without repeat count):

Response: 263

3	File Description	Document
	Upload Supporting Document	View Document
	Institutional data in prescribed format	View Document

#### 2.2

## Number of teaching staff / full time teachers year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
79	92	116	139	153

# 3 Institution

#### 3.1

# Expenditure excluding salary component year wise during the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
491.07	210.81	125.21	325.37	833.14

File Description	Document
Upload Supporting Document	<u>View Document</u>

# 4. Quality Indicator Framework(QIF)

## **Criterion 1 - Curricular Aspects**

#### 1.1 Curricular Planning and Implementation

#### 1.1.1

The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment

#### **Response:**

The outlined approach to curriculum delivery in the institution reflects a well-structured and comprehensive strategy aimed at providing students with a holistic and effective learning experience.

#### **Academic and Departmental Calendar:**

- The institution adheres to the academic schedules provided by the university.
- However, for institutional convenience and day to day activities college Academic Calendar and Departmental Academic Calendar are prepared each semester, encompassing various activities such as working days, internal assessments, guest lectures, industrial visits, value-added courses & internships.

#### **Subject Allotment and Timetables:**

- The Head of the Department (HOD) facilitates allocation of subjects, including open electives, based on faculty expertise, technical skills, competency, student feedback, and academic performance.
- Timetables are prepared in advance comprising of theory, tutorial, and practical classes, considering the curriculum's credit requirements.

#### **Lesson Planning and Delivery:**

- Faculty members create detailed lesson plans showing the hourly plan of course delivery, making use of syllabus, academic calendar, and individual faculty timetable.
- Course internal assessments assignments and industrial visits are planned, and delivery is carried out as per the schedule.

#### **Course Study Material:**

Faculty members prepare course study materials, including lecture notes, question banks, and lab manuals, focusing on outcome-based education and Bloom's Taxonomy and distributed to the students.

• To ensure the above processes, an internal academic audit is conducted twice in a semester.

#### **Monitoring and Feedback:**

- Class committee meetings are conducted to continuous monitor the progress of the courses and resolve any academic & non academic issues .
- Feedback from students in class committee meetings is used to monitor the quality of course delivery. Further, the department meetings are conducted to review the teaching-learning process and suggest improvements in the course delivery.

#### **Syllabus Coverage and Deviations:**

- The Head of the Department periodically reviews unit-wise syllabus coverage and deviations from the lesson plan, addressing any issues.
- A similar procedure is followed for practical classes, with special classes arranged for any loss of working days.

#### **Supplementary Learning:**

- NPTEL video lectures, model-based learning, and additional assignments are provided to supplement classroom lectures.
- Guest lectures, value-addition courses, and industrial visits are arranged to fill curricular gaps and provide hands-on exposure to students.

#### **Assessment and Performance Monitoring:**

- The academic performance of students is measured through centralized internal assessment and model tests.
- Remedial classes are conducted for slow learner, while advanced learners are encouraged to undertake mini-projects and seminars.

#### **Course Outcome Survey**

• A course outcome survey is conducted, and the attainment of course outcomes is analysed, providing valuable insights into the effectiveness of the curriculum.

Overall, the institution's approach encompasses careful planning, continuous monitoring, and proactive measures to enhance the learning experience and ensure the achievement of course outcomes. The integration of feedback loops, supplementary learning resources, and industry exposure reflects a commitment to delivering Holistic education.

File Description	Document	
Upload Additional information	<u>View Document</u>	

# 1.2 Academic Flexibility

#### 1.2.1

Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM,

Page 26/84 27-03-2024 05:58:34

# NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)

**Response:** 33

File Description	Document	
List of students and the attendance sheet for the above mentioned programs	View Document	
Institutional programme brochure/notice for Certificate/Value added programs with course modules and outcomes	View Document	
Institutional data in the prescribed format	View Document	
Evidence of course completion, like course completion certificate etc. Apart from the above:	View Document	
Provide Links for any other relevant document to support the claim (if any)	View Document	

Other Upload Files	
1	<u>View Document</u>

#### 1.2.2

Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

Response: 57.09

1.2.2.1 Number of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
676	827	511	863	951

File Description	Document	
Upload supporting document	View Document	
Institutional data in the prescribed format	View Document	

#### 1.3 Curriculum Enrichment

#### 1.3.1

Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability in transacting the Curriculum

#### **Response:**

The Institution has taken up many initiatives over the years which has provided a platform to integrate crosscutting issues relevant to Gender sensitization, Environment and Sustainability and Professional Ethics into the Curriculum.

Curriculum based courses relevant to the cross cutting issues that are offered to the students undertaking various Engineering programmes are Environmental science and Engineering, Principles of Management, Total Quality Management and Professional Ethics in Engineering,

Students are able to realize the value of human life during natural calamities by the course Disaster management. Students learn inter-relationship between disasters and development.

In the course 'Principles of Management' Students are exposed to various planning tools and techniques of an organization. Students acquire knowledge on modern human resource management techniques that are followed in organizations.

Environmental Science and Engineering course is offered which emphasizes on Environment and sustainability issues. Students learn scientific, technological, economic and political solutions to environmental problems faced by Society.

In our institution, various student clubs that provide platform for students to interact and showcase their academic abilities and participate in extra- curricular based community activities are functioning.

#### **Professional Ethics**

- The young minds of the students are tuned to maintain high standards by the professional code of conduct maintained within the campus.
- Ethical practices such as not indulging in any malpractice, maintaining Ragging free environment are ensured.
- The university curriculum includes an elective subject titled "Professional Ethics in Engineering which inculcates ethical standards required for engineers.
- Workshops on Ethical Hacking and Cyber Security are periodically conducted to cultivate ethical approaches in the work environment.

#### **Gender Sensitization**

- As a co-educational institute, measures towards gender sensitization in terms of equality are taken for both the genders in all aspects.
- The increasing trend in girl student admission over the years proves the fact that our college atmosphere is highly preferred and conducive for female students.
- In every co-curricular and extra- curricular activity, both boys and girls teams are formed and given equal opportunity. Empowering women within the student community is one of our main

objectives. Eminent personalities in our society were invited to give special lectures on women development.

#### **Human Values**

- All the students visit old age homes, homes for destitute children, etc. once in a semester.
- A NSS unit comprising boys and girls wing of 100 students performs social service activity by adopting a village every year.
- Student volunteers of Rotaract club extend their service by arranging blood donation camp for the needy people.
- Training for Fire safety measures and precautions is conducted every year in the college.

#### **Environment and Sustainability**

- The curriculum includes elective subjects to provide in-depth knowledge about environment protection and sustainability.
- Short term courses that enhance and inculcate remedial practices for issues on environment and sustainability are conducted. Most of the communications are done through e – mails, SMS, WhatsApp and CAMU app to ensure a paperless academic environment.
- Activities of the Entrepreneur Development cell events and the annual cultural fest conducted every year highlight the current environmental and social issues and strive to obtain solutions.

File Description	Document	
Upload Additional information	<u>View Document</u>	

#### 1.3.2

Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)

Response: 49.39

#### 1.3.2.1 Number of students undertaking project work/field work / internships

Response: 563

File Description	Document	
Upload supporting document	View Document	
Institutional data in the prescribed format	View Document	

### 1.4 Feedback System

1.4.1

Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website

**Response:** A. Feedback collected, analysed, action taken& communicated to the relevant bodies and feedback hosted on the institutional website

File Description	Document
Feedback analysis report submitted to appropriate bodies	View Document
At least 4 filled-in feedback form from different stake holders like Students, Teachers, Employers, Alumni etc.	View Document
Action taken report on the feedback analysis	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document
Link of institution's website where comprehensive feedback, its analytics and action taken report are hosted	View Document

# **Criterion 2 - Teaching-learning and Evaluation**

#### 2.1 Student Enrollment and Profile

#### 2.1.1

#### **Enrolment percentage**

**Response:** 63.18

# 2.1.1.1 Number of seats filled year wise during last five years (Only first year admissions to be considered)

2022-23	2021-22	2020-21	2019-20	2018-19
314	305	233	415	363

#### 2.1.1.2 Number of sanctioned seats year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
360	360	420	714	726

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
Final admission list as published by the HEI and endorsed by the competent authority	View Document
Document related to sanction of intake from affiliating University/ Government/statutory body for first year's students only.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 2.1.2

Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the last five years

Response: 66.21

2.1.2.1 Number of actual students admitted from the reserved categories year wise during last five years (Exclusive of supernumerary seats)

2022-23	2021-22	2020-21	2019-20	2018-19
224	258	208	394	360

# 2.1.2.2 Number of seats earmarked for reserved category as per GOI/ State Govt rule year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
304	304	355	604	614

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
Final admission list indicating the category as published by the HEI and endorsed by the competent authority.	View Document
Copy of communication issued by state govt. or Central Government indicating the reserved categories(SC,ST,OBC,Divyangjan,etc.) to be considered as per the state rule (Translated copy in English to be provided as applicable)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 2.2 Student Teacher Ratio

#### 2.2.1

Student – Full time Teacher Ratio (Data for the latest completed academic year)

**Response:** 14.43

#### 2.3 Teaching- Learning Process

#### 2.3.1

Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences and teachers use ICT- enabled tools including online resources for effective teaching and learning process

#### **Response:**

Our institution takes efforts to make teaching learning process students centric by adopting various suitable learning methodologies.

In the curriculum itself students are made to have experiential learning in laboratory courses and end semester project work. Students are encouraged to do mini-projects from second year to have more experiential learning and project expo organized to motivate the students. Students also participate in competitions, symposia, conferences at both national and international level for real time exposure. In addition, value added courses are arranged with industrial experts to give hands on exposure to the latest technologies. Students have registered and participating in Hacker rank and Hacker earth to develop their coding skills.

Students are encouraged for participative learning methods by giving presentation on topics related to curriculam and also general and advanced topics during technical seminar hour.

Departments plan and organise industrial visits for students in order to provide exposure to industrial work culture. Guest lectures by eminent experts from industry and academics are organised. Departments organize student activities to promote the spirit of teamwork like NSS camps, institutional social responsibility through Rotaract club, Tree plantation, Blood donation camp, Drug Awareness Program, Gender Equity Program to help the students to learn the Art of living in a team for social and community welfare. Students have applied for student project proposal in TNSCST (Tamilnadu state council for science and technology).

Our institution has student's chapters namely IEI, IETE, ISTE, IAENG which facilitate students to participate in project contest involving hands on learning. In addition, students participate in National level competitions such as Smart India Hackathon contest.

Case study method is adopted in the teaching learning process to make the students have logical thinking and practical knowledge to develop problem solving ability. Tutorial classes form part of the course delivery to inculcate problem solving skills among the students. Laboratories are well equipped with internet facility which enables students to self-learn and widen their learning skills through problem solving. The problem solving ability is further honed by incorporating questions on case studies in the internal assessment examinations.

The students register for online NPTEL Certificate courses so that they can gain knowledge in addition to their regular curriculum.

The faculty members use the ICT enabled learning tools such as PPT, Video lectures, Audio system, online sources, GCR, NPTEL Videos to expose the students for advanced knowledge and practical learning. The seminar halls are ICT enabled with projectors installed and the campus is enabled with high speed Wi-Fi connection. Google classroom is used to manage and post course related information learning material, Quizzes, assignments etc. The internal test is conducted online using GCR and accessed. Virtual labs are used to conduct labs through simulations. The college library is enriched by elearning materials such as e-journals, eBooks, video lectures which can be accessed by students from anywhere inside the campus.

File Description	Document
Upload Additional information	<u>View Document</u>

# 2.4 Teacher Profile and Quality

#### 2.4.1

Percentage of full-time teachers against sanctioned posts during the last five years

Response: 100

#### 2.4.1.1 Number of sanctioned posts year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
79	92	116	139	153

File Description	Document
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 2.4.2

Percentage of full time teachers with NET/SET/SLET/ Ph. D./D.Sc. / D.Litt./L.L.D. during the last five years (consider only highest degree for count)

Response: 12.44

# $2.4.2.1\ Number\ of\ full\ time\ teachers\ with\ NET/SET/SLET/Ph.\ D./\ D.Sc.\ /\ D.Litt./L.L.D\ year\ wise\ during\ the\ last\ five\ years$

2022-23	2021-22	2020-21	2019-20	2018-19
22	19	15	10	6

File Description	Document
List of faculties having Ph. D. / D.Sc. / D.Litt./ L.L.D along with particulars of degree awarding university, subject and the year of award per academic year.	View Document
Institution data in the prescribed format	<u>View Document</u>
Copies of Ph.D./D.Sc / D.Litt./ L.L.D awareded by UGC recognized universities	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 2.5 Evaluation Process and Reforms

#### 2.5.1

Mechanism of internal/ external assessment is transparent and the grievance redressal system is time- bound and efficient

#### **Response:**

The college has an Examination Cell headed by a Controller for overseeing the conduct of all the internal and end-semester examinations. The Controller is assisted by a team consisting of Exam coordinator and Office Assistants. Students are evaluated based on their performance in Internal Assessment and End-Semester Examinations. **The students are kept informed of the evaluation processes**, attendance requirements as well as the grading systems for the internal and External assessments **during orientation program** at the beginning of each semester, by the department.

#### **Internal Assessment:**

The Internal Assessment marks shall be awarded as per the academic regulations of the individual programme. During each semester, two Internal Test, 2 Unit Test and one Model Examinations are held as per the Institution academic calendar approved by the head of the Institution. The duration of both the Internal Assessment Test and Unit test is 1 hour 30 minutes and of Model Examination is 3 hours. Internal Assessment Tests, Unit test, Assignments and Attendance are the various components of the Internal assessment. Detailed Schedule of Internal Assessment test, Model and Unit Test are prepared and published in time.

The Examination Cell is responsible for framing and announcing the time table for CIA programmes for all the UG & PG Programmes, obtaining the relevant question papers for Unit test, Internal Assessment test and Model test, printing, hall arrangement plan, Schedule for Invigilator and squad and distribution of the answer scripts for valuation by course teachers. Question papers are set by course teachers as per the prescribed format including Blooms taxonomy and course outcome and the same will be verified by the Moderation committee.

To ensure timely needs of students during assessment examinations, frequent visits are made by the Squad members and various department HoDs. The Internal Assessment marks shall be submitted to the Office of Examinations at the end of each assessment and the result analysis will be submitted to the Principal office for necessary Improvement plan.

#### **External Assessment:**

Exam cell will follow the guidelines and rules issued by the affiliating University for conducting end semester examination. The end semester examinations are conducted and controlled by the University and if students have any problem, the Principal communicates to the Controller of Exams of the University about the grievances of the students. The grievances of the students in external examination at university level are addressed through a proper channel by obtaining photocopies of the evaluated answer scripts, re-evaluation and by paying a prescribed university fee. University Question paper feedback is given to the University through proper channel, for the out of syllabus questions and discrepancies by the concerned faculty members.

File Description	Document
Upload Additional information	View Document

#### 2.6 Student Performance and Learning Outcomes

#### 2.6.1

Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website

#### **Response:**

The University has clearly stated the Programme outcomes for all its academic Programs and Courses. These expected learning outcomes are clearly spelled out in the prospectus/bulletins of the University and are also uploaded in our college website.

The course outcomes are defined by the faculty members using Bloom's taxonomy who handle the subjects and verified by the Academic coordinator. Each course in the program consists of five to seven course outcomes by considering POs and PSOs of our department. Students are also educated and provided with the detailed syllabus and course outcomes in each course and the assessment strategy for each course.

Awareness on COs, POs and PSOs are consciously promoted to Students

The programme outcomes, programme specific outcomes are disseminated through College website, Department website, Orientation programs, Display boards, Magazines, HOD room, Laboratories, Seminar Hall, Department Library, Among stakeholders through e-mails transactions and through Various functions such as:

#### 1.Alumni meet

#### 2. National and International conferences.

Programme Outcomes (PO) were formulated reflecting the Vision, Mission and Strategies of the College and the UGC guidelines on Graduate Attributes. While formulating POs, the College considered academic excellence, research potency, scope of extension activities, human values, livelihood generation, and recent trends in the job markets. The suggestions of the alumni and other stakeholders were also taken into account. The entirecurricula were restructured and the assessment pattern were modified in consultation with experts. The students were enlightened with the PO pattern through the College Website, Digital Board, Handouts and orientation by the concerned course teachers.

The Programme Specific Outcomes (PSO) are designed by the concerned Departments with their respective vision, mission and scope of the programme. The Course Outcomes (CO) are formulated by the Department in consideration with the course teachers and with expected cognitive, affective and psychomotor learning levels.

Even though the COs are given by the Anna University along with the syllabus, if necessary the COs are modified and reframed by the respective course incharge with the knowledge of concerned HoD and senior professors. COs are communicated to the students during the introduction class itself. COs along with lesson plan are printed and issued to the students during the first class.

File Description	Document
Upload Additional information	View Document

#### 2.6.2

Attainment of POs and COs are evaluated.

#### Explain with evidence in a maximum of 500 words

#### **Response:**

The University has clearly stated the Programme outcomes for all its academic Programs and Courses. These expected learning outcomes are clearly spelled out in the prospectus/bulletins of the University and are also uploaded in our college website. The course outcomes are defined by the faculty members using Bloom's taxonomy who handle the subjects and verified by the Academic coordinator. Each course in the program consists of five to seven course outcomes by considering POs and PSOs of our department. Students are also educated and provided with the detailed syllabus and course outcomes in each course and the assessment strategy for each course. In all the interactions with the students, awareness on COs, POs and PSOs are consciously promoted.

The	Assessmer	nt tool is	divided	into	two	categories	3.

Direct Assessment

**Indirect Assessment** 

#### **Direct Assessment**

The course outcomes attainment is obtained from the performances made by the student in Internal Assessment and End Semester University examination. The Internal Assessment includes Internal Examination and Assignments. The External Assessment is done by the End semester University Examination. The end semester examination will be conducted by the university. The final grade of the course will be calculated considering, 20% weightage for Internal Assessment and 80% weightage for end semester performance as per Anna university regulations.

In a semester three Internal Assessments will be conducted

Assessment - I – Units I & II and IAT 1 and Assignment (CO1 & CO2 – Each 50 marks)

Assessment - II – Units III & IV and IAT 2 and Assignment (CO3 & CO4 – Each 50 marks)

Assessment - III- Model Test All5units and Assignment (CO1, CO2, CO3, CO4 & CO5- Each 20 marks)

The course direct attainment will be calculated considering, 20% weightage for Internal Assessment and 80% weightage for end semester performance as per Anna university regulations.

#### **Project Work**

The students are permitted to carry out their projects either in-house or in an Industrial / Research Organization, on the recommendations of the Head the Department. There shall be three reviews during the semester by the review committee which are continuously assessed. The project work shall be evaluated at the end of the semester by an internal and university appointed external examiners.

#### **Indirect Assessment tools**

Alumni Survey

Student Feedback

Parent Feedback

Student Exit survey

Course outcome survey

#### **Attainment of POs and PSOs**

- Correlation matrix of course outcomes of each course with program outcome is done with suitable level. (1-Low, 2-Medium, 3-High)
- Course to PO mapping is done by average of each CO to PO.
- Correlation matrix of course outcomes of each course with program specific outcome is done with suitable level. (1-Low, 2-Medium, 3-High)
- Course to PO mapping is done by average of each CO to PSO.
- Course outcome attainment is calculated by averaging the attainment of all course outcomes for each course.
- Similar procedure is followed for all the courses during the Programme.

File Description	Document
Upload Additional information	View Document

#### 2.6.3

Pass percentage of Students during last five years (excluding backlog students)

Response: 89.06

# 2.6.3.1 Number of final year students who passed the university examination year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
324	293	449	320	340

# 2.6.3.2 Number of final year students who appeared for the university examination year-wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
380	333	454	324	447

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
Certified report from Controller Examination of the affiliating university indicating pass percentage of students of the final year (final semester) eligible for the degree programwise / year-wise.	View Document
Annual report of controller of Examinations(COE) highlighting the pass percentage of final year students	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# 2.7 Student Satisfaction Survey

1	7	1
7.	•	

Online student satisfaction survey regarding teaching learning process

## **Response:**

File Description	Document
Upload database of all students on roll as per data template	View Document

## Criterion 3 - Research, Innovations and Extension

#### 3.1 Resource Mobilization for Research

#### 3.1.1

Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)

Response: 15.88

# 3.1.1.1 Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
.075	0	4.65	5.45	5.70

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	<u>View Document</u>

## 3.2 Innovation Ecosystem

#### 3.2.1

Institution has created an ecosystem for innovations, Indian Knowledge System (IKS),including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident

#### **Response:**

Besides patents To work towards, copy rights, designs, experts in various areas of technology are invited to campus for transfer of knowledge. Over the years to promote creative and critical thinking, several webminars, seminars and workshops have been conducted in various technologies like AI explore, Non destructive testing, reverse engineering, copyrights & Trademarks, network virtualization, Drones in xtended reality, 5g etc. This has kindled the interest of students and the filing of patents is gradually increasing.

The Institution has been sanctioned by MSME govt of India to be a HOST INSTITUTION BUSINESS INCUBATOR (HI/BI). Technology Business Incubator invites students to pitch their business ideas and create a trademark of their own.

Further being a host institution people with innovative ideas can apply to MSME for funds through our

HIBI. Recently a sum of Rs.15 lakhs has been sanction towards the making of a smart dustbin.

In2022-2023 20 patents have been published.

The institution encourages students to be a part of start upTamilnadu.

An MOU has been signed with iTNT Tamilnadu. Technology HUB

About 7 different types of programmes to promote intellectual property involving various technologies have been conducted in the campus in the year 2022-2023.

There exists in campus the following cells to promote IPR

#### **Institution's Innovation Council**

Loyola Institute of Technology has establishedIIC cell in the academic year 2021-22. Institute Innovation council of our college has carried out many activities as per the direction of IIC calendar plan. Calendar activity of IIC is divided into four quarters under two semesters with four categories like self-driven, IIC-driven, MIC-driven and Celebration activities.LIT IIC Cell is functioning with council members. IIC council member list contains Principal as a president, Convener, NIRF coordinator, Social Media coordinator, IPR coordinator, IPR coordinator and department level Innovation ambassadors. Cell also contains external coordinators from back sector, patent specialist, Start-up cell and Innovator. Minimum 10 students from each department are assigned as a student coordinators. After every quarter report has to be uploaded in IIC portal under every quarter plan. College can participate in zone level meeting at the end of every academic calendar. A network of IICs is established to promote innovation and entrepreneurship in the Institution through multitudinous modes leading to an innovation promotion ecosystem in the campuses.

#### **Entrepreneurship Development Cell (EDC)**

Our institution has Entrepreneurship Development Cell to motivate, develop and strengthen the entrepreneurial qualities of the budding professionals who are interested in starting their own venture. The primary goal of an EDC is to nurture an entrepreneurial ecosystem within the institution and empower aspiring entrepreneurs to transform their innovative ideas into viable businesses. Entrepreneurship Development cell Providing guidance, mentorship, and resources to help students and faculty turn their business ideas into viable startups. Entrepreneurship Development cell Offering incubation facilities, coworking spaces, and access to networks of investors, mentors, and industry experts to support startup development.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

#### 3.2.2

Number of workshops/seminars/conferences including on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship conducted during the last five years

Response: 57

# 3.2.2.1 Total number of workshops/seminars/conferences including programs conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
13	10	14	10	10

File Description	Document
Upload supporting document	<u>View Document</u>
Institutional data in the prescribed format	View Document

#### 3.3 Research Publications and Awards

#### 3.3.1

Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

Response: 0.22

# 3.3.1.1 Number of research papers in the Journals notified on UGC CARE list year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
19	15	15	6	3

File Description	Document
Link to the uploaded papers, the first page/full paper(with author and affiliation details)on the institutional website	View Document
Link to re-directing to journal source-cite website in case of digital journals	View Document
Links to the papers published in journals listed in UGC CARE list or	View Document
Institutional data in the prescribed format	<u>View Document</u>
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 3.3.2

Number of books and chapters in edited volumes/books published and papers published in national/international conference proceedings per teacher during last five years

**Response:** 0.23

# 3.3.2.1 Total number of books and chapters in edited volumes/books published and papers in national/international conference proceedings year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
10	18	6	8	19

File Description	Document
List of chapter/book along with the links redirecting to the source website	View Document
Institutional data in the prescribed format	<u>View Document</u>
Copy of the Cover page, content page and first page of the publication indicating ISBN number and year of publication for books/chapters	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## 3.4 Extension Activities

3.4.1

Outcomes of Extension activities in the neighborhood community in terms of impact and sensitizing the students to social issues for their holistic development during the last five years.

#### **Response:**

Loyola Institute of Technology actively participates in a variety of holistic extension activities programmes for its own students and the surrounding villages of Palanchur, Papanchatram and Neman. LIT has conducted various societal relevant activities through the National Service Scheme (NSS) to promote the social and overall development of humanity in nearby villages such as Palanchur, Papanchatram and Nemam Village. In accordance with NSS, LIT has organized numerous health camps and initiatives to raise awareness about World Health Day and International Yoga Day. In addition, LIT has conducted blood donation camps to raise awareness about the health of human society, and many of our LIT students have volunteered and assisted the needy directly and indirectly.

LIT has held tree plantation camps in Palanchur, Nemam and at Pappanchatram village and conducted a Mega Tree Plantation Programme at Nemam village to raise awareness on the green house effect and save earth. On the International Day of Yoga, NSS also organized programme to raise awareness about Yoga as a way of life, with the aim of promoting the value of human health and fitness, both physically and mentally. This programme educates participants on how to maintain physical fitness in the age of modern technology.

LIT- NSS has launched several social well-being projects for the nearby residents to get awareness on environment for college students, the importance of Yellow Bag Rally and Green India. Moreover, we are conducting various programme on health related awareness, including a tobacco awareness rally program, and a drug abuse awareness programme in association with Leo Club. LIT NSS has involved in distribution of sanitizer, mask, food and awareness on "Covid'19" to the public at nearby villages of COVID pandemic period. Moreover, Our NSS volunteers has supported in various societal activities Such as Cleaning camp activities in General Medical camp, School white washing, Palanchur Village.

LIT actively involved in conducting various awareness programmes on measures to prevent drugs, viral fever and also conducts blood donation camp in the institution as well as outside. LIT had conducted a program to enhance awareness on art, culture and natural heritage.

The institution offers special care in empowering girl students and women faculty through various initiatives. Under its banner, invited talks are delivered by leading career women from various walks of life to create awareness on safety, health, career, and self-employment aspects for our students and also for women in the neighbouring village of Palanchur. Every year, in our institution, to showcase the talents of girl students, Women's Day is celebrated, and various competitions are conducted under this cell. Medical camps and health awareness programs have been conducted for the staff. The institutions have played a crucial role in empowering women by providing assistance and guidance to help them learn about entrepreneurship.

File Description	Document
Upload Additional information	View Document

#### 3.4.2

# Awards and recognitions received for extension activities from government / government recognised bodies

#### **Response:**

Loyola Institute of Technology has many awards and recognition for extension activities from various government and non-government bodies. Institute has fetched many awards by contributing in social, academic, research and innovation related activities. Institute is constantly working with industries and government organization to serve neighbourhood.

Student's organizations have donated food to needy people in collaboration with Rotract Club by collecting food and dress for people. Students have done entrepreneurship program among the women groups of Poonamalle. The Leo club of LIT has done several social activity including corona awareness camp, Drug awareness, Road safety, Women Empowerment etc.,

Loyola Institute of Technology received "Tobacco free campus Award" by Department of Health and Family Welfare. Our students received award for NSS by Gnyaanamad Educational Institution.

Institute has been awarded as recognition of outstanding contributions and dedication to the advancement of cyber security and to spread cyber crime awareness as a social responsibility to school and colleges by National Cyber Security Research Council.

LIT received Excellence Award in Educational Award by M.P.KANIMOZHI KARUNANIDHI at VIDIYAL 2022 conducted by Tamil Nadu

Advanced Technical Training for up skilling program.

The awards and recognitions received from different NGOs and the Trust motivated our NSS volunteers and made them involved in creating a positive environment.

Institute encourages faculty members to contribute for extension activities at individual levels. Faculty members received Best Faculty Awards for their significant contributions from various organizations. Faculty members also empanelled on various government bodies for carrying out extension activities. SWAYAM portal has appreciated the contribution of institute by appreciating work of the institute.

Smart India Hackathon (SIH) is a nationwide initiative that provides students with a platform to solve pressing problems faced in our daily lives. The goal is to inculcate a culture of product innovation and problem-solving.

- SIH aims to harness the creativity and expertise of students, academicians, and visionaries.
- It engages participants through institute-level hackathons, sparking imagination and futuristic thinking.
- SIH unlocks value by encouraging innovation and out-of-the-box thinking.
- It impacts students, ministries, PSUs, private organizations, and institutes.
- Participants compete as teams, offering technical solutions to real-world problems and have a

chance to win prizes worth up to ?4,00,000

File Description	Document
Upload Additional information	View Document

#### 3.4.3

Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community during the last five years.

Response: 56

# 3.4.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS/ NCC etc., year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
25	10	3	10	8

File Description	Document
Photographs and any other supporting document of relevance should have proper captions and dates.	View Document
Institutional data in the prescribed format	<u>View Document</u>
Detailed report for each extension and outreach program to be made available, with specific mention of number of students participated and the details of the collaborating agency	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 3.5 Collaboration

#### 3.5.1

Number of functional MoUs/linkages with institutions/industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.

**Response:** 43

File Description	Document
Summary of the functional MoUs/linkage/collaboration indicating start date, end date, nature of collaboration etc.	View Document
List of year wise activities and exchange should be provided	View Document
List and Copies of documents indicating the functional MoUs/linkage/collaborations activitywise and year-wise	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# **Criterion 4 - Infrastructure and Learning Resources**

### 4.1 Physical Facilities

#### 4.1.1

The Institution has adequate infrastructure and other facilities for,

- teaching learning, viz., classrooms, laboratories, computing equipment etc
- ICT enabled facilities such as smart class, LMS etc.

Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc (Describe the adequacy of facilities in maximum of 500 words.)

#### **Response:**

Loyola Institute of Technology epitomizes excellence in higher education, boasting a sprawling campus spanning 10.42 acres and a meticulously crafted built-up area of 25876.54 square meters. This esteemed institution prides itself on its robust infrastructure, designed to foster innovation, teamwork, and competence among students, equipping them to confront global challenges and emerge as impactful contributors to modern society. With a steadfast belief in the transformative power of adequate infrastructural facilities, the institute's primary focus lies in creating a dynamic learning environment conducive to nurturing capable, confident, and responsible engineering graduates.

The uninterrupted power supply of 112 KVA and water supply further augment the conductive learning environment, supported by a captive power generator and a dedicated 2(5HP) water plant. We have 2 generators of 100 KVA and 120 KVA, solar plant with a capacity of 20 KVA, and a water treatment plant .We have 2 computer centers with a computer lab in each department, along with 8 seminar halls, 1 air-conditioned auditorium with a capacity of 600 and another auditorium with 1500 capacity. A playground with 2 indoor and 10 outdoor games, smart classrooms and 3 conference halls. The yoga program makes stress reduction, improved flexibility, enhanced concentration, increased energy levels, better posture, and overall well-being. We also have Silambam for women.

The campus features multi-storied buildings housing state-of-the-art facilities including 34 laboratories, 48 classrooms, dining facilities, placement and training blocks, 2 expansive auditoriums, a library, cafeteria, and hostel meticulously designed to facilitate effective knowledge transfer. Boasting well-appointed classrooms equipped with cutting-edge ICT facilities with smart classrooms, ERP, Video lecture, learning materials, Quiz conduction. Affiliated with Anna University, all academic programs are meticulously curated to meet university standards, with laboratory equipment exceeding prescribed requirements. The institution offers additional labs, providing students with exposure to the research and advancements, complemented by licensed software for computing needs. Additionally, we have skill development centers.

A robust network comprising computer systems connected to the internet through a leased line with high bandwidth of 100 mbps and SOPHOS firewall ensures seamless connectivity. 12 Wi-Fi connectivities are available across the campus and hostels, with numerous access points enhancing accessibility.

The main library, complemented by departmental libraries, offers a vast collection of books and digital resources, facilitating academic pursuits. Additionally, a digital library access to online resources.

The institute boasts well-equipped auditoriums and seminar halls, furnished faculty cabins, purified water coolers, and CCTV surveillance for added security. Extensive transportation services, including a fleet of buses to the convenience of students and staff.

Emphasizing the holistic development of students, It provides world-class sports facilities, nurturing talent and promoting physical fitness through a gymnasium of advanced equipments. Cultural programs are conducted periodically, fostering student participation and nurturing talents in various forms of fine arts.

In conclusion, Loyola Institute of Technology stands as a beacon of academic excellence, shaping well-rounded individuals prepared to excel in the modern world. Through its comprehensive facilities and programs, the institute remains committed to nurturing a generation of capable, compassionate, and globally aware professionals.

File Description	Document	
Upload Additional information	<u>View Document</u>	
Provide Link for Additional information	View Document	

#### 4.1.2

Percentage of expenditure for infrastructure development and augmentation excluding salary during the last five years

Response: 30.01

# 4.1.2.1 Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
88.83	9.82	66.59	139.97	290.74

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for infrastructure augmentation should be clearly highlighted)	View Document

## 4.2 Library as a Learning Resource

#### 4.2.1

Library is automated with digital facilities using Integrated Library Management System (ILMS),

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adequate subscriptions to e-resources and journals are made. The library is optimally used by the faculty and students

#### **Response:**

The institution has a library of 1100 square meters with a seating capacity of 100, accommodated on two floors consisting of a Periodical section, Reading Hall, Digital Library, Technical section, Reference section, etc. It is automated to provide effective access to learning resources. Automation has aided cataloguing, circulation, acquisitions, resource management, and reporting & analytics.

The library has a book collection of 29,973 volumes, comprising 10,636 titles of Text and Reference books on various disciplines. Additionally, the library subscribes to 96 National and International Journals and 4 leading newspapers. It follows the Open Access System and provides its services to meet the requirements of UG and PG students, faculty members of the college. The college library has various sections such as the Reference section, Textbook section, etc.

The central library was fully automated in the year 2012 with Auto-lib Library Software Management. Auto-Lib is popular and advanced integrated Library automation management software. Auto-Lib software is fully integrated, versatile, user-friendly, cost-effective, and multi-user Library automation software. It is WEB-enabled for Intranet and Internet environments, incorporating the latest IT/WEB tools and techniques, and adheres to international standards. Regardless of the types of collection or size, it also provides WEB-based services on the campus Intranet/Internet. It is installed in more than 400 reputed institutions in India and abroad.

The library subscribes to more than 96 national and international journals and magazines, DELNET E-Journals, and E-Books. Necessary steps have been taken to subscribe to a greater number of journals and magazines to enhance research activities.

The library uses a bar-code technology system for the circulation of books, including issuing, returning, and renewing them. Undergraduate (UG) students can borrow up to four books, postgraduate (PG) students can borrow five books, and faculty members can borrow up to six books, depending on availability in the library. The borrowing period is 15 days for both students and faculty members, with the option to renew once for an additional 15-day period if the book is not reserved. Processing of library materials, including book preparation and Barcode ID card creation, is conducted at the Technical Section in the central library.

Users can access the OPAC (Online Public Access Catalog) anywhere on the campus through the internet. The reference section, periodical, and current awareness sections also function from the reading room for readers' convenience. Some rare collections of the college are displayed in the reading room.

The library has one server, and 20 PCs are designated for users to access OPAC, databases, e-books, e-journals, and other e-resources. The reading areas in the library have been Wi-Fi enabled to provide wireless access to the Internet.

The Institutional Repository is developed using the Digital Library. It provides links to thousands of e-journals, e-books,e-learning materials, and subject-related e-contents.

The Periodical or Journal section is located on the ground floor, where print journals, magazines, and

newspapers are available for users and refer to the latest content and news published in the relevant materials. It contains 96 journals, magazines, and 4 newspapers

File Description	Document
Upload Additional information	View Document

#### 4.3 IT Infrastructure

#### 4.3.1

Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection

Describe IT facilities including Wi-Fi with date and nature of updation, available internet bandwidth within a maximum of 500 words

#### **Response:**

Our Institution's IT infrastructure is primarily designed to provide students and faculty with open and equitable access. The college has adequate facilities of the information technologies including Wi – Fi and the internet connections well spread through the campus and it is updated frequently. Furthermore, the institution's administrative and examination framework have benefited by the same.

The Institutes has Wide fiber optic network that connects all the departments, hostels, library and college offices. The Institutes has 200 Mbps 1:1 least line from TATA Tele Business Services and 100 Mbps Wi-Fi internet from Tele Business Services. The internet can be accessed from more than 500 desktops through LAN and WiFi. Wi-Fi access points are available in all parts of the campus including hostels, enabling the students to access the learning materials and the Internet uninterruptedly. A separate team with in-house staff takes care of the IT related requirement of the campus such as system administration and technical support which includes software installation, network monitoring, internet connection and digital library etc.,

The internet bandwidth connectivity is upgraded based on the requirement to provide the quality internet connectivity. The bandwidth speed is upgraded periodically as follows:

Using SOPHOS firewall, threat protection, VoIP security, VLAN, content/packet filtering, URL Blocking, anti-spam, anti-virus, intrusion detection & prevention are endorsed to securitize.

There are totally 489 desktop systems available and maintained with almost zero downtime in the campus with constant up-gradation. All the computers are connected to uninterrupted power supply for safe operations and security is also ensured due to the usage of hardware firewall. The various other computing facilities like printers, software, database, dedicated lease-line of 200 Mbps bandwidth with Wi-Fi networking caters to all the labs and departments for the benefit of faculty and students. The computer systems are upgraded periodically.

All the departmental faculty rooms and offices are provided with internet facilities for the convenience of

the students, faculty and office staff members. LCD Projector, Printers and Scanners are effectively utilizing for academic purpose. Adequate number of class rooms & seminar halls are equipped with LCD projectors and Wi-Fi facility to deliver presentations. Online placement drives, industrial training and classes are conducted for the students to enhance their skills as a part of ICT mode of learning.

The college uses various open source and license software which are upgraded periodically with the latest version. Based on the syllabus updation, the required software is purchased and license is renewed periodically.

Effective CCTV Surveillance network is available all over the campus.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

#### 4.3.2

Student – Computer ratio (Data for the latest completed academic year)

Response: 2.48

# 4.3.2.1 Number of computers available for students usage during the latest completed academic year:

Response: 460

File Description	Document
Purchased Bills/Copies highlighting the number of computers purchased	View Document
Extracts stock register/ highlighting the computers issued to respective departments for student's usage.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# 4.4 Maintenance of Campus Infrastructure

#### 4.4.1

Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, during the last five years (INR in Lakhs)

Response: 38.02

# 4.4.1.1 Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year wise during the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
219.51	81.88	25.59	114.05	313.95

File Description	Document
Institutional data in the prescribed format	View Document
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for maintenance of infrastructure should be clearly highlighted)	View Document

# **Criterion 5 - Student Support and Progression**

## **5.1 Student Support**

#### 5.1.1

Percentage of students benefited by scholarships and freeships provided by the institution, government and non-government bodies, industries, individuals, philanthropists during the last five years

Response: 85.18

# 5.1.1.1 Number of students benefited by scholarships and freeships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
1012	1059	1191	1203	1246

File Description	Document
Year-wise list of beneficiary students in each scheme duly signed by the competent authority.	View Document
Upload Sanction letter of scholarship and free ships (along with English translated version if it is in regional language).	View Document
Upload policy document of the HEI for award of scholarship and freeships.	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 5.1.2

Following capacity development and skills enhancement activities are organised for improving students' capability

- 1. Soft skills
- 2. Language and communication skills
- 3. Life skills (Yoga, physical fitness, health and hygiene)
- 4.ICT/computing skills

**Response:** A. All of the above

File Description	Document
Report with photographs on Programmes /activities conducted to enhance soft skills, Language and communication skills, and Life skills (Yoga, physical fitness, health and hygiene, self-employment and entrepreneurial skills)	View Document
Report with photographs on ICT/computing skills enhancement programs	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 5.1.3

Percentage of students benefitted by guidance for competitive examinations and career counseling offered by the Institution during the last five years

Response: 75.26

# 5.1.3.1 Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
828	886	1094	1052	1186

File Description	Document
Upload supporting document	<u>View Document</u>
Institutional data in the prescribed format	View Document

#### 5.1.4

The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases

- 1. Implementation of guidelines of statutory/regulatory bodies
- 2. Organisation wide awareness and undertakings on policies with zero tolerance
- 3. Mechanisms for submission of online/offline students' grievances
- 4. Timely redressal of the grievances through appropriate committees

**Response:** A. All of the above

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File Description	Document
Proof w.r.t Organisation wide awareness and undertakings on policies with zero tolerance	View Document
Proof related to Mechanisms for submission of online/offline students' grievances	View Document
Proof for Implementation of guidelines of statutory/regulatory bodies	View Document
Details of statutory/regulatory Committees (to be notified in institutional website also)	View Document
Annual report of the committee motioning the activities and number of grievances redressed to prove timely redressal of the grievances	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## **5.2 Student Progression**

#### 5.2.1

Percentage of placement of outgoing students and students progressing to higher education during the last five years

Response: 85.28

# 5.2.1.1 Number of outgoing students placed and / or progressed to higher education year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
294	257	392	264	265

### 5.2.1.2 Number of outgoing students year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
324	293	449	320	340

File Description	Document
Number and List of students placed along with placement details such as name of the company, compensation, etc and links to Placement order(the above list should be available on institutional website)	View Document
List of students progressing for Higher Education, with details of program and institution that they are/have enrolled along with links to proof of continuation in higher education.(the above list should be available on institutional website)	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 5.2.2

Percentage of students qualifying in state/national/international level examinations during the last five years

**Response:** 1.18

5.2.2.1 Number of students qualifying in state/ national/ international level examinations year wise during last five years (eg: IIT/JAM/NET/SLET/GATE/GMAT/GPAT/CLAT/CAT/ GRE/TOEFL/ IELTS/Civil Services/State government examinations etc.)

2022-23	2021-22	2020-21	2019-20	2018-19
2	0	1	0	0

File Description	Document
List of students qualified year wise under each category and links to Qualifying Certificates of the students taking the examination	View Document
Institutional data in the prescribed format	<u>View Document</u>
Provide Links for any other relevant document to support the claim (if any)	View Document

## 5.3 Student Participation and Activities

#### 5.3.1

Number of awards/medals for outstanding performance in sports/ cultural activities at University / state/ national / international level (award for a team event should be counted as one) during the last five years

Response: 48

# 5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19	
34	12	0	1	1	

File Description	Document
Upload supporting document	<u>View Document</u>
list and links to e-copies of award letters and certificates	View Document
Institutional data in the prescribed format	<u>View Document</u>
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 5.3.2

Average number of sports and cultural programs in which students of the Institution participated during last five years (organised by the institution/other institutions)

Response: 52.4

# 5.3.2.1 Number of sports and cultural programs in which students of the Institution participated year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
103	66	19	36	38

File Description	Document
Upload supporting document	<u>View Document</u>
Institutional data in the prescribed format	View Document

## 5.4 Alumni Engagement

#### 5.4.1

There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

#### **Response:**

The Alumni Meet serves as a cornerstone event in Loyola Institute of Technology's calendar, embodying tradition and innovation. Far from conventional gatherings, our alumni meet represents a culmination of strategic foresight, planning, and unwavering commitment to foster enduring bonds between the institution and our graduates.

#### **Engagement Initiatives:**

Months of planning pave the way for the Alumni Meet, co-ordinated by a dedicated team comprising alumni volunteers and faculties. Through diverse communication channels such as social media platforms, alumni databases, and personalized invitations, the event ensures widespread participation and enthusiasm among alumni from varied backgrounds and geographies.

#### **Interaction:**

The success of the Alumni Meet are its curated sessions and interactive workshops, meticulously designed to foster profound engagement and knowledge exchange. Alumni and faculty members converge to lead discussions on emerging trends, professional development, and the evolving landscape of their respective fields. These sessions serve to bridge the gap between academia and industry, enriching the educational experience for the current students and alumni as well.

#### **Recognition and Appreciation:**

Our Alumni Meet also serves as a platform for celebrating and honouring our distinguished alumni for their outstanding contributions to their respective fields and to the society. Through awards ceremonies, alumni testimonials, and video tributes, their achievements are celebrated, reaffirming the enduring legacy of excellence that defines our institution. Our Alumni Meets provide alumni with ample opportunities to reconnect with old friends, forge new connections, and share insights learnt from their diverse personal and professional journeys. These interactions foster a sense of belonging and community spirit that extends far beyond the confines of campus.

#### **Impact:**

These gatherings not only strengthen ties between the alumni and their alma mater but also facilitate

contributions to the societal development. Our Alumni, who are equipped with diverse skills and experiences acquired through their professional and personal journeys, leverage their networks and resources to initiate impactful community projects and initiatives. Our Alumni Meets provide a platform for the alumni to coordinate and collaborate on such endeavours, amplifying their impact on addressing local needs and societal challenges.

Our Alumni Meets feature structured mentoring programs where experienced graduates provide guidance and support to current students and recent graduates. These mentorship initiatives extend beyond academic or career advice; as they often encompass personal development, leadership skills, and navigating professional challenges. By nurturing the next generation of professionals, our alumni contribute directly to the advancement of society.

#### **Sustained Engagement:**

The impact of the Alumni Meets extend well beyond the event itself. Follow-up initiatives, including mentorship programs, ensure sustained engagement and collaboration throughout the year. Alumni contributions, both financial and in-kind, bolster the college's endowment, supporting scholarships, research endeavours, and infrastructure projects that enrich the academic experience for future generations.

The engagement of Alumni Meet at our college exemplifies our institution's dedication to fostering lifelong connections, celebrating achievements, and contributing to societal development.

File Description		Document
Upload Addit	onal information	View Document

## Criterion 6 - Governance, Leadership and Management

## 6.1 Institutional Vision and Leadership

#### 6.1.1

The institutional governance and leadership are in accordance with the vision and mission of the Institution and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance and in their short term and long term Institutional Perspective Plan.

#### **Response:**

Loyola Institute of technology, through effective governance, institutional planning and development, prepares strategies to improve the quality of higher education for the students in tune with the vision and mission of the institution as it includes all the stakeholders. The Institute follows the guidelines from UGC, AICTE and Anna University and aims for continuous improvement through the implementations of ISO 9001: 2015 and IQAC norms and participating in NIRF, ARIIA, etc.

The institution strongly believes in transparency, quality, participative leadership and delegation of power at various levels. The healthy institutional practices followed in this direction has helped us in the implementation of NEP, and sustained institutional growth through proper planning and governance. The following consistent efforts are key to our success.

- Zeal to maintain a healthy environment for the growth of teaching-learning process which focuses
  upon connecting skills with innovation through organization of Short-Term Courses, add-on
  courses and language enhancement studies and a balance between curricular and extracurricular
  activities.
- Consistent engagement with research and extension activities that enable the students and staff to develop hands-on approach for experiential learning.
- Social empowerment through making education accessible to the students belonging to diverse sections of society.
- Student welfare activities including financial assistance to students of the marginalized sections of society.
- Inculcating values of empathy, gender equity, environmental consciousness, professional ethics and spirit of social justice.
- To maintain an amicable bond between the stakeholders including the students, teachers, parents and the civil society.
- To develop interdisciplinary approach in learning and to enhance skills among students through several add-on courses which include certificate and diploma courses in foreign languages.
- To conduct mentorship sessions and remedial classes in order to accelerate personal and educational development of students.
- To upgrade the skills of faculty and non-teaching staff through faculty development / training programmes, seminars and workshops.
- To ensure academic flexibility under the NEP through the Academic Bank of Credit (ABC) which would enable students to digitally store the academic credits earned from various recognized Higher Education Institutions (HEIs) further facilitating the scheme of multiple entry and exits during the course of their choice.

- To develop Multidisciplinary/interdisciplinary approach to teaching-learning under the NEP 2020 through Generic Elective (GE) papers, Skill Enhancement Courses (SEC) and Value Addition Courses (VAC) which provide opportunity for students to enhance their ability and skills to face the personal and professional challenges.
- Regular holding of mentor-mentee meetings to address the needs of individual students.
- Commitment to Outcome-Based Education (OBE) with focus upon creating an optimal learning environment and support for students to make learning student-centric, interactive and outcome-oriented.
- Participation of students in various Societies, Clubs and Cells in the college as either members or the coordinators encourages them to face challenges with confidence and emerge as leaders.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

## **6.2 Strategy Development and Deployment**

#### 6.2.1

The institutional perspective plan is effectively deployed and functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc

#### **Response:**

Loyola Institute of Technology is a Christian Minority Institution of Higher Technical Education, founded by Rev. Fr. J.E. Arulraj, which has been established and managed by the Sisters of DMI (Daughters of Mary Immaculate) in the year 2003 with a mission of providing Quality Technical Education to the student community.

The overall functioning of the college is governed by the **governing council** headed by the Founder/Chairman. Regular Governing Council meetings are held in the Institute and recommendations and suggestions are discussed and approved. The governing council and trust frame directive principles and policies, amend and approve them from time to time and reviews the functioning of college. The feedback which we collect from all the stakeholders will be used for value adding, bridging the gap in the Anna University proposed curriculum and devising course and lesson plans.

The Principal of the College assisted by several Heads of the departments carry out the policies of the governing body. Hods are given autonomy in carrying out their academic functions.

Non-academic departments like Civil maintenance, Electrical maintenance and housekeeping are effectively functioning under the respective heads for sorting out maintenance issues. Different committees, cells and professional societies are actively functioning in the Institution with the participation of faculty members.

List of Committees:
Anti Ragging Committee
Grievance Committee
Internal Complaints Committee
Innovation Incubator Committee
Cells/Councils
Internal Quality Assurance Cell (IQAC)
Entrepreneur Development Cell (EDC)
Placement Training Cell
Student Centric Activities: Professional Bodies
IEI Students Branch
IETE Student Forum
Clubs:
Youth Red Cross
RRC
Rotaract Club
Dramuda Club
Language Club
LEO Club
Appointment, service rules and Procedures:
The Institute has a set of well-established rules, policies, recruitment procedure, promotional policies and regulations within the frame work of AICTE, State Govt. and the Anna university, which are approved by the Governing Council of the Institute.

The Institution selects qualified and competent persons by a well-defined procedure:

Vacancies are advertised in leading national newspapers and in College Website.

The screened candidates are called for an interview.

The Staff Selection Committee comprises the Principal, and two internal subject experts (HoD from same department and Core department HoD)

The candidates are asked to demonstrate their teaching skills by delivering lectures for a few

minutes before the selection committee. Based on their teaching skills, research attitude and other skills, the candidates are selected.

The Principal issues the appointment order.

The appointments are approved by the management committee during its regular meetings.

The service rules, the recruitment procedure and the promotion policies are framed in accordance to the norms of AICTE, Anna University.

#### Deployment of institutional Strategic/ perspective/development plan etc

The institutions are to be competitive to the changing global scenario and tune themselves to meet the expectations of the stakeholders.

Taking into account history of the institution, a detailed SWOT Analysis was done. Based on the analysis a strategic plan has been developed with respect to the following aspects:

Teaching – Learning Process

Research and Development

Human Resource Planning and Development

**Industry Interaction** 

**Community Engagement** 

Internationalization

File Description	Document
Upload Additional information	<u>View Document</u>
Institutional perspective Plan and deployment documents on the website	View Document

6.2.2

#### Institution implements e-governance in its operations

- 1. Administration
- 2. Finance and Accounts
- 3. Student Admission and Support
- 4. Examination

**Response:** A. All of the above

File Description	Document
Screen shots of user interfaces of each module reflecting the name of the HEI	View Document
Institutional expenditure statements for the budget heads of e-governance implementation ERP Document	<u>View Document</u>
Annual e-governance report approved by the Governing Council/ Board of Management/ Syndicate Policy document on e-governance	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## **6.3 Faculty Empowerment Strategies**

#### 6.3.1

The institution has performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression

#### **Response:**

The college values the contributions of its employees to the development and progress of the institution.

The following are the Welfare schemes provided to Teaching and Non-teaching Staff:

- Canteen facility for teaching and non teaching staff members.
- Fee concession for employee's dependent children within the institution.
- Leave facility includes Casual, medical, Maternity and marriage.
- Reimbursement of registration fees and OD facilities are given to the teaching staff towards attending seminars, workshops, and conferences.
- Recreation centre like yoga, gym, indoor and outdoor games.
- Transportation facilities are available to all the teaching and non-teaching staff.
- Accommodation facility in Hostel for the staff members based on their request.
   The faculty development programmes are organized periodically to enhance their proficiency and performance and they are encouraged to take up online courses, register for doctorates, attend conferences, seminars and work on exam preparation.

- There is financial support for teachers participating in academic activities outside of college. A well-equipped infrastructure is provided for teaching and non-teaching staff.
- All faculty members are provided with LAN internet and Wi-Fi facility to promote paperless administration.
- Faculty award is given for achievers.
- Library is equipped with internet facility to facilitate research work.

The institute has structured mechanism for the performance evaluation system for teaching staff and is carried out regularly at the end of every academic year.

### **Appraisal Mechanism:**

The faculty need to self assess in terms of teaching performance , Research and Development, Department and institution activities, conferences attended, papers published, NPTEL courses completed, awards / recognition's won and participation in various academic and administrative bodies both within and outside college.

The faculty will submit the self appraisal form to the Head of the Department with all the relevant supporting materials/documents which will be submitted to the Principal. Principal will assess the scores awarded for the criteria and submit to the management with the recommendations. The Strength and Weakness of the faculty member in all the criteria are analyzed. HoD observes the preparedness and involvement of the faculty in multiple activities throughout the year. The self appraisal scores with the recommendations of the Head of the Department and the Head of the institute will be considered by the management for career advancements. Class observation reports help in monitoring new members in the team and feed back is taken

The College receives feedback from the students at the end of the every semester to rate the faculty on parameters related to teaching, subject-knowledge, punctuality and commitment. The students feedback gives further inputs regarding the effectiveness of the teaching learning methodologies used. Faculty mentoring is undertaken by the Principal to faculty who need improvement and further guidance.

After the publication of the University results, the Management organizes a meeting of all faculty exclusively to present, review and analyze the semester results. Subject wise results are presented and a thorough critical analysis is undertaken to understand the reasons for good or poor performance.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

#### 6.3.2

Percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years

Response: 52.68

# 6.3.2.1 Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
45	57	60	67	76

File Description	Document
Policy document on providing financial support to teachers	View Document
Institutional data in the prescribed format	View Document
Copy of letter/s indicating financial assistance to teachers and list of teachers receiving financial support year-wise under each head.	View Document
Audited statement of account highlighting the financial support to teachers to attend conferences / workshop s and towards membership fee for professional bodies	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 6.3.3

Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years

Response: 68

# 6.3.3.1 Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
61	73	83	113	129

#### 6.3.3.2 Number of non-teaching staff year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
19	18	16	19	24

File Description	Document
Refresher course/Faculty Orientation or other programmes as per UGC/AICTE stipulated periods, as participated by teachers year-wise.	View Document
Institutional data in the prescribed format	<u>View Document</u>
Copy of the certificates of the program attended by teachers.	View Document
Annual reports highlighting the programmes undertaken by the teachers	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

## 6.4 Financial Management and Resource Mobilization

#### 6.4.1

Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/ nongovernment organizations) and it conducts financial audits regularly (internal and external)

#### **Response:**

The Institute is run by the educational and charitable trust DFT which has effective strategy in mobilizing the funds to run the institution without any short comes to achieving the mission and vision of the institution without compromising on the quality policy.

The source of income is mainly generated from the students fees. The fees collected from students are used for many academic development activities of the college. The hostel fee is collected from hostel students and used for operations and maintenance of Hostel.

Apart from these, there are other sources of fund mobilization:

- 1. Sponsored Research Project obtained by the faculty members from different funding agencies, Government and Non-government organizations.
- 2.Industry Training and Consultancy activities offered/Provided by the faculty members to

organizations and other institutions.

- 3. Sponsorship FDPs/Conferences/ Seminars etc in the form of Registration Fee.
- 4.Registration fee from the Industrial/Institutional Sponsorships for FDPs, Conferences, Seminars, etc.
- 5.Self supported Conferences, Seminars, Workshops, FDPs and Training Programme organized by the departments.
- 6. Establishment of Industry Sponsored Laboratories and Centre of Excellence
- 7. Management contribution towards Donations/Endowments
- 8.Funds received from DFT Trust
- 9. The College is also receiving scholarships from the State and Central Govt to distribute to the needy.
- 10. Faculty members are eligible to submit proposals for conducting workshops, seminars, FDPs, conferences and research projects to AICTE, TNSCST, CSIR,MSME, UGC and DST for obtaining funds to enhance the quality of teaching, learning and research. The funds are used for purchase of advanced equipment and conduct research in the specific areas proposed.

Institute has been planning towards efficient use of budgeted fund for each academic year. The fund is optimally utilised for the Students, Staff, laboratory, infrastructure, Library, etc.

#### Institution conducts internal and external financial audits regularly

The college has the mechanism for both internal and external financial audits. Meetings will be conducted regularly for settling various accounts of the institution. The external audit helps the management to understand the financial requirements and the suitable actions are taken to utilize the fund mobilized through various sources.

#### Internal audit

Internal auditor appointed by the Management audits all the financial transactions of the college. The income and expenditure of the institution will be verified by the Administrator and the Principal on daily basis. Office Superintendent and Accountant will check cash ledgers on daily basis.

Funds received from various agencies are properly accounted, vouched and verified in the college office and finally checked by the Administrator and the Principal. There is well defined process for budget preparation and sanction of budget. The approved budget is communicated to all the department incharges and administrative in-charges. All the vouchers and bills are audited once in a month by an Internal Auditor. Proper record for all budget expenses is maintained by each department in-charges, administrative in-charges, accounts department, and the Principal office.

File Description	Document
Upload Additional information	<u>View Document</u>

## **6.5 Internal Quality Assurance System**

#### 6.5.1

Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes. It reviews teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities

#### **Response:**

IQAC is responsible for

- Development of quality culture in the institution, Conducting Internal and External audits in academic, administrative and research activities periodically.
- Developing quality benchmark parameters for various academic and administrative activities of the institution.
- Disseminating the importance of various quality parameters in higher education.
- Act as nodal agency of the Institution for coordinating quality related activities, like Adoption and dissemination of best practices.
- Organizing workshops, seminars on quality related themes and promotion of quality circles.
- Conducting regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements
- Collaborative quality initiatives with other institution(s)
- Any other quality audit recognized by state, national or international agencies (ISO)

The IQAC is continuously ensuring various quality assurance steps at all levels of the institution functioning as mentioned below.

- 1. Teaching Learning process Outcome Based Education (OBE)
- 2.Institute Innovation Council (IIC)
- 3. Utilization of ICT Tools
- 4.Industrial tie-ups
- 5.Learning Resources
- 6.Research Publications and Patents

#### **Teaching Learning process – Outcome Based Education (OBE)**

Outcome based education (OBE) system has been implemented towards strengthening the learning potential of students. The implementation of Outcome Based Education in the teaching learning process produced the following benefits

Significant skill development among the learners

Avoided the gap between formal education and career training

Measure of learner's actual performance

Learner-centered classroom approach rather than Teacher-centric

Activity-based curriculum in which the teacher performs and the learner manipulates Collaborative and blended learning

Emphasis on much needed soft skills like communication skills, interpersonal skills, analytical skills, working attitude.

Periodic IQAC meetings are held to discuss and review the teaching learning process and to validate if the methodologies followed are steadfast in achieving the intended outcomes. There is well-planned structure, as per the Guidelines of IQAC, to review the Teaching Learning Process.

Student feedback system is also introduced to collect feedback from all the students after completing a particular semester.

Our students are encouraged to undergo Value Added Courses and attend workshops. These courses develop in them an urge to keep them updated on the latest trends and improves their technical skills further. The value added courses are offered for all the students every semester.

IQAC understands the importance of the opportunities to explore new areas of interest –our staffs and students were encouraged to join NPTEL Certification courses. This will enable students obtain certificates for courses and make them employable in the industry or pursue a suitable higher education programme.

#### **Institute Innovation Council (IIC)**

The main objective of functioning of IIC includes, conducting various innovative and entrepreneurial activities, Identifying and rewarding new innovations, Organizing regular workshops, seminars, interactions through successful entrepreneurs. Conducting project expo among various domain students and Organizing Hackathons, idea competition, startup ideas, mini-challenges etc.

#### **Academic and Administrative Audit**

The Academic and Administrative Audit team concentrated the following parameters in teaching learning processes: Programme Structure and Content, Curriculum Design, Teaching and Learning Strategy, Assessment methods / Student Evaluation, Staff Development Activities, Student Feedback, Stakeholders Feedback, Stakeholders Satisfactory survey.

File Description	Document
Upload Additional information	<u>View Document</u>

# 6.5.2

# Quality assurance initiatives of the institution include:

- 1. Regular meeting of Internal Quality Assurance Cell (IQAC); quality improvement initiatives identified and implemented
- 2. Academic and Administrative Audit (AAA) and follow-up action taken
- **3.** Collaborative quality initiatives with other institution(s)
- 4. Participation in NIRF and other recognized rankings
- 5. Any other quality audit/accreditation recognized by state, national or international agencies such as NAAC, NBA etc.

# **Response:** A. Any 4 or more of the above

File Description	Document	
Quality audit reports/certificate as applicable and valid for the assessment period.	View Document	
NIRF report, AAA report and details on follow up actions	View Document	
List of Collaborative quality initiatives with other institution(s) along with brochures and geo-tagged photos with caption and date.	View Document	
Provide Links for any other relevant document to support the claim (if any)	View Document	
Link to Minute of IQAC meetings, hosted on HEI website	View Document	

# **Criterion 7 - Institutional Values and Best Practices**

# 7.1 Institutional Values and Social Responsibilities

#### 7.1.1

Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years.

Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words

#### **Response:**

#### **GENDER EQUITY**

Promoting women's development and ensuring gender equality are crucial for the advancement of our nation. At Loyola Institute of Technology, we strive to create a strong foundation of gender equity. The Women Redressal Committee (WRC) includes both faculty and students as members. Its mission is to foster a gender-sensitive community within the campus and society at large. The phone numbers of WRC members are displayed at vintage point to help students.

The Women Redressal Committee (WRC) has been actively organizing diverse academic, technical, medical, cultural, and social events to uplift women and promote the true significance of gender equality within the college community. WRC is committed to the well-being of female employees and students, addressing their grievances and concerns. Additionally, issues or grievances can be registered through our website. The WRC also plays a crucial role in monitoring and preventing sexual harassment. Motivational programs are regularly conducted to enhance self-confidence and overall well-being.

WRC will bring out the hidden talents of the girls students, they are encouraged to participate in the cultural programs conducted inside the campus.

CCTV cameras are installed in the campus to monitor the important locations of campus. The footage will be monitored and screened for lawful activities.

Faculty discuss with students about healthy relationships and behavioral etiquettes, emphasizing the importance of communication and respecting personal boundaries. Students are provided with Identity cards to ensure safe entry into the college and the details like blood group, phone numbers and address are mentioned on it. During night time, the campus is covered with sufficient lighting arrangements. Girl's hostels are guarded 24\*7 security guards.

# **Mentoring and Counseling**

The counseling system offers support to female students, helping them recognize and address their challenges. It aims to empower girls, foster leadership skills, and boost self-motivation, ultimately building their confidence across various aspects of their careers through diverse training programs."

### **COMMON ROOMS**

Our college offers well-furnished separate hostels for female students. Restrooms are conveniently available on every floor. Additionally, within the college campus, there are separate common rooms designated for girls. Sick rooms equipped with essential facilities, including first aid boxes, cots, beds, mirrors, chairs, dustbins, and wheelchairs, ensure student comfort. In case of emergencies, students are promptly taken to the ambulance for further medical attention

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

# 7.1.2

#### The Institution has facilities and initiatives for

- 1. Alternate sources of energy and energy conservation measures
- 2. Management of the various types of degradable and nondegradable waste
- 3. Water conservation
- 4. Green campus initiatives
- 5. Disabled-friendly, barrier free environment

**Response:** A. 4 or All of the above

File Description	Document
Policy document on the green campus/plastic free campus.	View Document
Geo-tagged photographs/videos of the facilities.	View Document
Circulars and report of activities for the implementation of the initiatives document	View Document
Bills for the purchase of equipment's for the facilities created under this metric	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 7.1.3

Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives are confirmed through the following

- 1. Green audit / Environment audit
- 2. Energy audit
- 3. Clean and green campus initiatives

#### 4. Beyond the campus environmental promotion activities

**Response:** A. All of the above

File Description	Document
Report on Environmental Promotional activities conducted beyond the campus with geo tagged photographs with caption and date	View Document
Policy document on environment and energy usage Certificate from the auditing agency	View Document
Green audit/environmental audit report from recognized bodies	View Document
Certificates of the awards received from recognized agency (if any).	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 7.1.4

Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and Sensitization of students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)

#### **Response:**

#### 1. Cultural Celebration

Loyola Institute of Technology conducted multi-cultural, multi-regional and multi-communal celebrations leading to tolerance and harmony such as Onam, Christmas and Pongal celebrations. Onam program fulfills cultural relevance, inclusivity, and community engagement. All students and staff enjoyed the Christmas celebrations with decorated auditorium, traditional prayer songs, carol songs, Santa Claus, Christmas gifts, etc. as a symbol of harmony and unity. Students of all departments and all years participated happily in the pongal celebrations, meant for praying to the Sun God and celebrating farmers. They made arrangements for the preparation of pongal and involved in all activities as a group. They depicted the cultures of many districts of Tamil Nadu, Andhra Pradesh, Kerala and Karnataka.

#### 2. Linguistic

The "word for the day" activity, being conducted every day in the classrooms expands vocabulary, improved language skill, enhanced communication, cognitive thinking, cultural awareness, motivation to learn and inspiration for long-term language skill improvement. A moral storytelling, as an event, is useful to enrich experience for participants, foster personal growth and nurturing moral development. Incorporating moral story telling results in profound benefits for participants, enhance their ethical

reasoning skills, and foster a deeper understanding of themselves and the world around them.

# 3. Socioeconomic Diversity

Nearly 200 students from various disciplines attended the programme and were educated regarding the types of drugs, their abuse and consequences to the health of the people.

Blood donation camp helped to save lives and resulted in improved student community engagement, reaffirmed the importance of altruism and solidarity in building healthier and more resilient societies.

By honoring press people, we could appreciate their important role in society and help to strengthen journalism as a cornerstone of democracy. When meeting with the press, the interaction allows for a diverse range of perspectives and insights to be considered, ultimately benefits the general public's understanding.

# 4. Rights & Duties

By attending Bhumi's Upcycling activity, students showed much interest to learn how to prepare the Paper bag, Cloth Bag and Bird Feeder. This program was multifaceted and developed several positive impacts like Increased Awareness, Behavioral Change, Community Engagement, Environmental Impact, Educational Opportunities, Promotion of Responsibility and Economic Benefits. The program contributed for building more sustainable and environmentally conscious communities

'Thirukkural reading' event offers numerous benefits for participants, ranging from cultural appreciation and moral development to critical thinking skills and community engagement. By fostering a deeper understanding of Thirukkural's timeless wisdom, participants are empowered to lead more ethical, fulfilling, and culturally enriched lives. Thirukkural, written by the ancient Tamil poet Thiruvalluvar, is a revered text that encompasses various aspects of life, ethics, and governance.

Voter awareness program organized played a vital role in cultivating informed, engaged, and empowered citizens who actively contribute to the democratic governance of their communities and society at large.

## 5. Responsibilites to citizens

Independence Day and Republic Day celebrations aim to instill a sense of pride, responsibility, and commitment to the ideals of democracy and constitutional governance, fostering a stronger and more cohesive nation.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

#### 7.2 Best Practices

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#### 7.2.1

Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual

# **Response:**

# 1. Skilling and Upskilling with Social Connect

#### THE OBJECTIVE:

In view of the policy of NEP that by 2040, all higher education institutions (HEIs) shall aim to become multidisciplinary and skilling should be implemented in line with the levels of NSQF. We have taken up skilling and upskilling as our practice. Starting small, today this has turned over the years as our best practice.

#### THE CONTEXT

For effective implementation of OBE (Outcome Based Education), at the end of the programme, the students are expected to possess skills and knowledge on par with the demands of the challenging job market. Further, such skill development programs foster an entrepreneurial mindset by providing students with the skills needed to start their own businesses.

#### THE PRACTICE

- Industry Collaborated Labs established at the SKILL DEVELOPMENT CENTRE
- ICT Academy (VMWARE Lab and Cloud Computing Lab),
- IBM Corporation (IOT Lab and Enterprise AI Lab),
- Tamil Nadu Advanced Technical Training Institute –TATTI (Solar Energy Lab)
- Tamil Nadu Advanced Technical Training Institute –TATTI (Fire Safety Lab)
- CDCE Robotics (Industrial Automation Lab)
- Blue Prism (Robotics Process Automation Lab)
- Cisco Systems (India) Private Limited (CISCO Lab)
- Technology Mobile Service & Training (Centre for Mobile Technology)
- For B.E. / B.Tech. students, skill programmes on Aptitude training, Smart Mobile Phone Technology, maintenance & Servicing (New Technology), Soft Skills & Personality Development, DevOps, Solar Technologies, CCNA, E-vehicles, Digital marketing, NXplorers Pro, Robotic Process Automation, Java & Networking, Digital Editing, Leadership Mastery, Employability and Interview Skills, AI & ML and 5G Six Sigma, Python Programming and ESDP on Microcontroller Programming, Auto CADD, Embedded Technologies, Mould Design, Computational Fluid Dynamics and Fusion 360, NX CAFD, Cyber Security, Industrial Automation, Logistics & Supply Chain have been conducted.
- Recently, our institution has been recognized as a skill hub for providing demand-driven and industry linked candidate-centric short term vocational skill training to the youth, so as to make them job-ready and/or an entrepreneur under the scheme **Pradhan Mantri Kaushal Vikas Yojana** (PMKVY) 4.0, implemented by National Skill Development Corporation (NSFC), Government of India.

#### EVIDENCE OF SUCCESS

- The Institution's Innovation Council (IIC) established at Loyola Institute of Technology had undertaken various activities prescribed by Innovation Cell, Ministry of Education, Government of India to promote Innovation and Start-up in campus during the IIC calendar year 2022-23 and has been **promoted from 1-star status to 3.5 star status**.
- For appreciating the services performed to women skill development, our college Principal Dr. Sujatha Jamuna Anand was given with Women Empowerment Ambassador award by Lakshyam Educational Group during International Women's day Celebration 2023.
- Our college received "Excellence in Education" award on account of consistent services in skill training to youth from Tamilnadu Advanced Technical Training Institute (TATTI) in 2022.

## **Problems Encountered and Resources Required**

Time constraint, identifying and bringing trained professionals/experts from industries or other institutions and upgrading to smart classrooms are the major limitations in implementing various skill development programmes.

# 2. Dissemination of Cyber Space Technology, Cyber Crime Awareness and Cyber Security Practices to Adolescence & Youth.

#### THE OBJECTIVES:

With our country aspiring to empower Indian society digitally providing access to educational, government and industrial services from the comfort of homes, cyber security becomes fundamental practice for every citizen. The success of any organization or country will depend on data privacy and it is very essential that children to adults be educated on cybercrimes and cyber security.

Evidence from a variety of cross-sectional, longitudinal and empirical studies implicate smartphone and social media use in the increase in mental distress, self-injurious behaviour and sociality among youth; there is a dose–response relationship, and the effects appear to be greatest among girls. With this scenario,

We, at Loyola, choose these objectives:

- 1. To be truly DIGITAL INDIA We need to educate youth that cybersecurity has become increasingly important as organizations and individuals rely more on technology to conduct business, communicate, and store sensitive information. Data security and privacy is of top priority.
- 2. To be updated with the trends in industry and keep in line with the requirements of NEP such as ethics and human & constitutional values like empathy, respect for others, cleanliness, courtesy, democratic spirit, spirit of service, respect for public property, scientific temper, liberty, responsibility, pluralism, equality, and justice.

LIT takes it as a social responsibility to decrease the cyber space addiction in young people. Loyola institute of technology in 2018 has become the resource centre of National cyber safety and security standards council, now known as the National cyber safety research council.

#### THE CONTEXT:

- The institution has organized several programmes in the college on cyber security technology and invited police officials for discussions. Students are encouraged to participate in external activities to understand and discuss with students outside.
- The college started to offer an undergraduate B.Tech. Degree programme in 'Computer Science and Engineering (Cybersecurity)' from the academic year 2023 2024.

#### THE PRACTICE:

- The Memorandum of Understanding (MOU) was made on 25th September, 2018 with Equinox Prinstine Infosolutions to explore the development of technologies, improve capabilities of common interest and engage projects, including software and hardware systems.
- We travel to rural areas across Tamilnadu to talk on effects of social media, prevention, protection and help available regarding cybercrimes. Thus, more than thousand school and college students have been imparted with the basics, necessity, features and techniques behind cyber security with an intention of social connect.

#### **EVIDENCE OF SUCCESS:**

Loyola Institute of Technology has been awarded with an **appreciation certificate** by National Cyber Security Research Council (NCSRC) in recognition of its outstanding contributions and dedication to the advancement of cyber security and to spread cyber security awareness program as a social responsibility to schools and colleges for the academic year 2022-23.

#### PROBLEMS ENCOUNTERED AND RESOURCES REQUIRED

Due to their lack of basic knowledge on cybersecurity, the major problems include hands-on training to rural and school children, maintaining employee engagement, ensuring the relevance of training content, overcoming language and cultural barriers, measuring program effectiveness and keeping up with evolving cyber threats.

File Description	Document	
Best practices as hosted on the Institutional website	View Document	

#### 7.3 Institutional Distinctiveness

7.3.1

Portray the performance of the Institution in one area distinctive to its priority and thrust within

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#### 1000 words

# **Response:**

#### LOYOLA-IBM DISRUPTIVE TECHNOLOGIES PRACTICE

NEP encourages that use of disruptive technologies in real sense facilitates the integration and convergence of policies, schemes, programmes and services needs to happen with merger of parallel structures following a multimodal approach and innovative strategies. Multi disciplinary activities are encouraged and moving forward in the road map of NEP Loyola Institute of Technology has collaborated for training in disruptive technologies.

With disruptive technology taking over the industry, the institution has worked steadily to disseminate the same amidst the students. Since 2016, Loyola Institute of Technology (LIT) has involved in various IOT & AI-based activities continually throughout the years. We are a member of the open power foundation USA from 2018. LIT has been an ambassador for whats on Watson from 2016. International visits to countries like Singapore and Thailand were arranged for technological interchange. The college offers an undergraduate programme in 'Artificial Intelligence and Data Science' from the academic year 2022 – 2023 and Computer Science and Engineering (Cyber Security) from 2023-2024. Some of our major activities include:

#### (i) Student-Centric Activities

A number of AI-based student-centric activities had been conducted by the institution and a few of them are listed below:

- The college conducted two-day workshop on "IBM Watson Internet of Things' on 28.7.2016. Ms. Gayathri Magie, Business Development Executive, IBM Watson IOT, USA was the Chief Guest.
- The IBM open POWER ML / DL Workshop was arranged on 07.03.2017.
- Loyola Institute of Technology and IBM & Object Arena Software Solutions jointly organized two day workshop on 'IBM Watson IOT' during 22 & 23rd April 2017.
- One day workshop on IBM Watson IOT-WOW "Whats on Watson" Smart Village Analytics, on 3.8.2017.
- An AI Developer Conference was organized at IITM Research Park by IBM in association with Loyola Institute of Technology on 3.11.2017.
- A conference was organized by IBM in association with Loyola Institute of Technology on 'Artificial Intelligence Using Silicon and Beyond' on 20.12.2017.
- An International Conference on Information, Communication and Automation was organized by Loyola Institute of Technology in association with ICT Academy on 28th February 2018. Dr. Leo Reiter delivered a lecture on Advanced Technologies in Communication.
- Our students and faculty members visited IBM Singapore and attended a program with demonstrations on AI and Quantum Computing on 18.09.2018.

- In 2018, a visit was arranged to the IBM star computing centre at Singapore for a group of 30 students and faculty from 17th Sep. to 20th Sep.
- An AI Developer Conference using OpenPOWER System was conducted on 6.12.2018.
- One day seminar on IBM Watson OpenPOWER AI & IoT was conducted on 20.12.2018.

# (ii) MoUs Signed

Till now, the following Memorandum of Understanding (MoU) had been signed with organizations which are highly performing in their business activities.

- Received sponsorship from IBM on 17th Jan. 2017 to do research collaborations and to conduct AI and IOT workshops.
- An MOU was executed on 17th Nov. 2022 with Imarticus Learning Pvt. Ltd. To establish a Data Science Club.
- LIT college signed an MOU with New Technology Mobile Service & Training, Coimbatore on 30th September 2022to meet the requirements of the college for the expansion of skill development of students in mobile technology.
- On 9th November 2022, an MOU was signed with M/s. IFOX OOH Private Limited.
- Memorandum of Understanding with International Society for Education Research & Technology was signed for using ISERT services and adopting the digital platform to provide student placement and education development services comprising of internships, mentorship, placements and project opportunities.
- A MoU has been executed on 6th September 2021 with Object Automation Software solutions Pvt. Ltd., which is one of the official partners for IBM and OpenPOWER, train students with the recent technologies such as AI, ML, DL, Blockchain Technology, IOT, Cybersecurity, Data Science and Quantum Computing.

## (iii) Workshops on AI

• On account of 75th year of Independence, an event 'FEMTECH 2022' was conducted on 12.8.2022 by LIT in association with IBM, IE(I), TNSC, TATTI and Object Automation to train 75 Women technocrats to disseminate the technology to others with an objective of 'Empowering Women through Technology' by 'Integration of AI and IOT for Security'.

# (iv) Laboratory Developed (Enterprise AI and Chip Design Lab)

The IBM Corporation India has sponsored to set up an Enterprise AI and Chip Design Lab in the college for the upgrading the knowledge and skills of staff and students primarily in the domain of artificial intelligence.

The major objectives of Enterprise AI section of the laboratory include smart services such as offering internships and job opportunities to students, supporting for industry-based student projects, installing state-of-the-art world class lab infrastructure and by providing high level theoretical knowledge background and hands-on practice on Linux, DBMS, Python, statistics, machine learning and data engineering.

#### (v) Achievements

With the knowledge and hands-on experience gained by the students and staff, lot of students showed interest in performing curriculum-based projects in the area of artificial intelligence, particularly, students belonging to ECE, CSE and IT disciplines demonstrated to a larger extent. About 54 projects have been carried out using various disruptive technologies including AI, IoT, cybersecurity, etc.

# (vi) Accolades

- As a token of appreciation, a Program Manager of IBM Corporation has sent an honoring letter expressing thanks for the support and promotion of AI projects over the past 7+ years.
- IBM joined hands with Loyola Institute of Technology to conduct a workshop-cum-Hackathon on Power Servers, Linux on Power & IBM DB2 in Power. Our students produced valuable solutions to real-world problems.

The implementation of the above disruptive technologies, as one of the uniqueness of the institution, will be highly useful to enhance the knowledge and skills of the students in the forthcoming years tremendously towards the sustainable growth of the nation.

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# 5. CONCLUSION

# **Additional Information:**

The skilling efforts have culminated in our campus having the PMKVY Training Centre which is a flagship scheme that provides skill development training for the students. This helps in implementing skill development training programs to the students in the nearby areas. We have actively enrolled in the start-up Tamilnadu incubator programme of our government. We one of the first 26 colleges in Tamilnadu to sign an MOU with iTNT (Tamilnadu technology hub) which we received from our youth affairs minister Mr Udhyanidhi stalin.

We are actively engaged in the Smart Campus Cloud Network (SCCN) of our central govt. Our faculty serve as external experts in the POSH committees of companies. Bridge courses offered for the students provide an opportunity to strengthen their academic foundation, acquire necessary skills and fill knowledge gaps. We are an official test centre of TCS and conduct most of the government exams, including NEET, IIT-JEE & Airport Authority of India. We are a test centre for police recruitment examinations.

# **Concluding Remarks:**

Our team is committed to academic excellence, innovation, and holistic development. Our focus on disruptive technology like AI, IoT & Cyber Security sets us apart and prepares our students for success in their future endeavours. We are working to enhance student's excellence in competitive examination. We have strategic plans for overall development in a systematic and phased manner which will culminate in the realization of our vision and mission and evolve into a college of excellence.