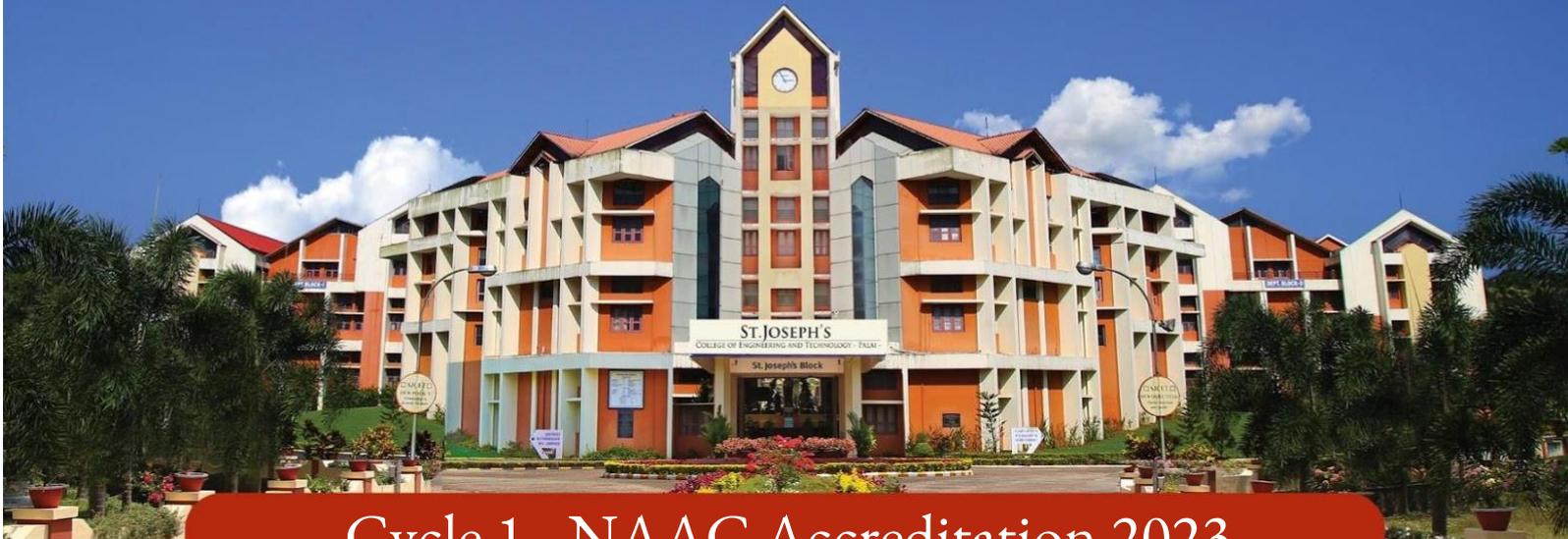




ST. JOSEPH'S

COLLEGE OF ENGINEERING
AND TECHNOLOGY,
- PALAI -

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Cycle 1 - NAAC Accreditation 2023

Criterion - 1

Curricular Aspects

Submitted to:



National Assessment and Accreditation Council

Contents

Courses in Curriculum Integrating Cross-Cutting Issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability

St. Joseph's College integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability while delivering various courses in the university-prescribed curriculum so as to inculcate in students an overall value system and through the future leaders, enhance the overall wellbeing of the society and the environment we live in.

The courses and its curriculum, through which SJ CET integrates cross-cutting issues are mentioned here in.

- Courses common to all branches of Engineering
 - The APJAKTU, to which SJ CET is affiliated has introduced various subjects which integrates cross cutting issues in the curriculum spread over the four years of Engineering, both as core subjects and as elective courses in the final year.
 - All students of SJ CET undergo the courses mentioned in this section in the subsequent pages.
- Courses specific to branches of engineering
 - Certain courses in specific branches of Engineering, even though are technical in content, integrates certain aspects of the cross-cutting issues as the course is being delivered.
 - Courses, both in the UG level and PG level which integrates cross-cutting issues are articulated in this section.
- Courses specific to postgraduate courses
 - Courses specific to Master of Business Administration and Master of Computer Applications which integrates cross cutting issues are articulated in this section.

Courses common to all branches of Engineering

The APJAKTU has introduced certain courses common to all branches of Engineering which integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability. The courses are

Issues	Courses
Professional Ethics	<u>ESL120 Civil and Mechanical Workshop</u>
	<u>ESL130 Electrical and Electronics workshop</u>
	<u>EST120 Basics of Civil and Mechanical Engineering</u>
	<u>EST200 Design and Engineering</u>
	<u>HS200 Business Economics</u>
	<u>HS210 LifeSkills</u>
	<u>HS300 Principles of Management</u>
	<u>HUN102 Professional Communication</u>
	<u>HUT101 LifeSkills</u>
	<u>HUT200 Professional Ethics</u>
	<u>HUT310 Management for Engineers</u>
	<u>PHL120 Engineering Physics Lab</u>
Gender	<u>BE102 Design and Engineering</u>
	<u>HS210 Life Skills</u>
	<u>HS300 Principles of Management</u>
	<u>HUT101 Life Skills</u>
	<u>HUT310 Management for Engineers</u>
	<u>ESL130 Electrical and Electronics workshop</u>
	<u>EST120Basics of Civil and Mechanical Engineering</u>
	<u>HUN102 Professional Communication</u>
Human Value	<u>MCN201 Sustainable Engineering</u>
	<u>EST200 Design and Engineering</u>
	<u>HS200 Business Economics</u>
	<u>HS210 Life Skills</u>
	<u>HS300 Principles of Management</u>
	<u>HUT101 Life Skills</u>

	HUT200 Professional Ethics
	HUT310 Management for Engineers
	HUN102 Professional Communication
	MCN202 Constitution of India
	ESL130 Electrical and Electronics workshop
	MCN301 Disaster Management
Environment and Sustainability	BE101-01 Introduction to Civil Engineering
	BE102 Design and Engineering
	HS200 Business Economics
	CYT100 Engineering Chemistry
	EST120 Basics of Civil and Mechanical Engineering
	MCN201 Sustainable Engineering
	EST200 Design and Engineering
	MCN301 Disaster Management
	BE103 Introduction to Sustainability
	ESL120 Civil and Mechanical Workshop
	EST120 Basics of Civil and Mechanical Engineering

Please on the link for detailed syllabus of these courses

Courses Specific to Engineering Branches

Department of Civil Engineering

In addition to the common courses offered to students in SJCET, the department of Civil Engineering integrates various cross cutting issues through the delivery of the following courses

Issues	UG
Professional Ethic	CE369 Disaster Management
	CEL 201 Civil Engineering Planning and Drafting Lab
	CEL 203 Survey Lab
	CET 206 Transportation Engineering
	CEL 204 Fluid Mechanics Lab
	CEL 332 Transportation Engineering Lab
	CEQ415 Project Phase I
	CEQ416 Project Phase II
Gender	CE369 Disaster Management
	CE352 Comprehensive Exam
	CET 206 Transportation Engineering
	CEL 202 Materials Testing Lab - I
	CEL 204 Fluid Mechanics Lab
	CET 309 Concrete Technology and Management
	CEL 331 Materials Testing Lab - II
	CEQ415 Project Phase I
CEQ416 Project Phase II	
Human Value	CE205 Engineering Geology
	CE234 Fluid Mechanics Lab
	CE369 Disaster Management
	CE331 Materials Testing Lab II
	CE302 Design of Hydraulic Structures
	CE 362 Ground Improvement Techniques
	CE405 Environmental Engineering I
	CE469 Environmental Impact Assessment
	CE431 Environmental Engineering Lab
	CE402 Environmental Engineering II
	CE404 Civil Engineering Project Management
	CET 203 Fluid Mechanics and Hydraulics
	CET 202 Engineering Geology
	CET 206 Transportation Engineering
	CEL 202 Materials Testing Lab - I
CET 309 Concrete Technology and Management	

	CEL 331 Materials Testing Lab - II
	CET 304 Environmental Engineering
	CET 306 Design of Hydraulic Structures
	CET 415 Environmental Impact Assessment
	CEQ413 Seminar
	CEQ415 Project Phase I
	CEQ416 Project Phase II
Environment and Sustainability	CE307 Geomatics
	CE369 Disaster Management
	CE302 Design of Hydraulic Structures
	CE 362 Ground Improvement Techniques
	CE469 Environmental Impact Assessment
	CET 202 Engineering Geology
	CET 206 Transportation Engineering
	CET 307 hydrology and Water Resources Engineering
	CET 309 Concrete Technology and Management
	CET 304 Environmental Engineering
	CET 306 Design of Hydraulic Structures
	CET 415 Environmental Impact Assessment
	CEQ413 Seminar
	CEQ415 Project Phase I
	CEQ416 Project Phase II

Please on the link for detailed syllabus of these courses

Department of Computer Science

In addition to the common courses offered to students in SJCET, the department of Computer Science and Engineering integrates various cross cutting issues through the delivery of the following courses

ISSUES	COURSE NAME
THE ENGINEER & SOCIETY	CST 362 Programming in python
	CSD 334 Mini Project
	CSL 333 DBMS LAB
	CST 309 Management Of Software Systems
	CST 201 Data Structures
	CST 203 Logic System Design
ENVIRONMENT AND SUSTAINABILITY	CSD 334 Mini Project
ETHICS	CSD 334 Mini Project
	CSL 333 DBMS LAB
	CSL 202 DIGITAL LAB
	CSL 201 Data Structures LAB
	CSL 204 Operating Systems Lab
	CSL 203 Object Oriented Programming Lab (in Java)
	CST 309 Management Of Software Systems
GENDER, INDIVIDUAL AND TEAM WORK	CSD 334 Mini Project
	CST 309 Management Of Software Systems
	CSL 333 DBMS LAB
	CSL 202 DIGITAL LAB

Please on the link for detailed syllabus of these courses

Department of Electronics and Communication Engineering

In addition to the common courses offered to students in SJCET, the department of Electronics and Communication Engineering integrates various cross cutting issues through the delivery of the following courses

Issues	UG Courses	PG Courses
Professional Ethic	EC341: Design Project	04GN60001: Research Methodology
	EC451: Seminar and Project Preliminary	04EC6591 Seminar1
	EC492: Project	04EC6592 Mini Project
	EC468: Secure Communication	04EC7591 Seminar 2
	ECD334: Mini Project	04EC7593 Project Phase 1
	ECD415: ProjectPhase1	04EC7594 Project Phase 2
	ECD416: ProjectPhase2	
	ECQ413: Seminar	
Gender	EC341: Design Project	
	EC451: Seminar and Project Preliminary	
	EC492: Project	
	EC468: Secure Communication	
	ECD334: Mini Project	
	ECD415: ProjectPhase1	
	ECD416: ProjectPhase2	
	ECQ413: Seminar	
Human Value	EC341: Design Project	
	EC451: Seminar and Project Preliminary	
	EC492: Project	
	EC468: Secure Communication	
	ECD334: Mini Project	
	ECD415: ProjectPhase1	
	ECD416: ProjectPhase2	
	ECQ413: Seminar	

	ECL202: Analog Circuits and Simulation Lab	
Environment and Sustainability	EC341: Design Project	04EC6526: Electronic Packaging
	EC451: Seminar and Project Preliminary	
	EC492: Project	
	ECD334: Mini Project	
	ECD415: ProjectPhase1	
	ECD416: ProjectPhase2	
	ECQ413: Seminar	

Please on the link for detailed syllabus of these courses

Department of Electrical and Electronics Engineering

In addition to the common courses offered to students in SJCET, the department of Electrical and Electronics Engineering integrates various cross cutting issues through the delivery of the following courses

Issues	Courses
Professional Ethic	EE492: Project
	EE341: Design Project
	EE451: Seminar and Project Preliminary
	EET 301: Power System I
Gender	EE492: Project
	EE341: Design Project
	EET 202: DC Machines & Transformers
	EET 301: Power System I
	EE451: Seminar and Project Preliminary
Human Value	EE341: Design Project
	EE451: Seminar and Project Preliminary
	EE492: Project
Environment and Sustainability	EE341: Design Project
	EE451: Seminar and Project Preliminary
	EE492: Project

Please on the link for detailed syllabus of these courses

Department of Mechanical Engineering

In addition to the common courses offered to students in SJCET, the department of Mechanical Engineering integrates various cross cutting issues through the delivery of the following courses

Issues	UG Courses	PG Courses
Professional Ethics	ME 341: Design Project	04ME 6203: Manufacturing Systems Management
	ME 451: Seminar & Project Preliminary	04ME 6207: Quality Engineering and Management
	ME 492: Project	04 GN 6001: Research Methodology
	ME 373: Human relations management	
	ME 404: Industrial Engineering	
	ME 376: Maintenance Engineering	
	MP 484: Project Management	
	IE 306 Supply chain and Logistics Management	
Human values	MP 482: Product Development and Design	
	ME 341: Design Project	04ME 6203: Manufacturing Systems Management
	ME 451: Seminar & Project Preliminary	04 ME 6218: Supply Chain Management
	ME 492: Project	04 ME 7209: Production Scheduling
	ME 304: DYNAMICS OF MACHINES	
	MT 482: INDUSTRIAL SAFETY	
	ME 376: Maintenance Engineering	
	ME 476: MATERIAL HANDLING & FACILITY PLANNING	
	ME 312: Metrology & Instrumentation	
	MP 482: Product Development and Design	
ME 405: REFRIGERATION & AIR CONDITIONING		

Environment and Sustainability	<u>ME 341: Design Project</u>	<u>04ME6201: Advanced Engineering Materials and Processing</u>
	<u>ME 451: Seminar & Project Preliminary</u>	<u>04 ME 6218: Supply Chain Management</u>
	<u>ME 492: Project</u>	
	<u>MP 482: Product Development and Design</u>	
	<u>ME 405: REFRIGERATION & AIR CONDITIONING</u>	
	<u>ME 476: MATERIAL HANDLING & FACILITY PLANNING</u>	
	<u>MT 482: INDUSTRIAL SAFETY</u>	

Please on the link for detailed syllabus of these courses

Courses Specific to Post Graduate Programs

Master of Business Administration

The various courses in the Master of Business Administration Programme which integrates cross cutting issues are

Issues	Courses
Professional Ethic	20MBA113 Ethics, Governance and Corporate responsibility
	20MBA NC1 Employability Enhancement Programme
Gender	20MBA113 Ethics, Governance and Corporate responsibility
	20MBA NC1 Employability Enhancement Programme
Human Value	20MBA113 Ethics, Governance and Corporate responsibility
	20MBA NC1 Employability Enhancement Programme

Please on the link for detailed syllabus of these courses

Master of Computer Applications

The various courses in Master of Computer Applications programme which integrates cross cutting issues are

Issues	COURSE NAME
Professional Ethic	20MCA107 Advanced Software Engineering
	20MCA192a IPR and Cyber Laws
	20MCA263 Cybersecurity and Cryptography
	20MCA244 Seminar
	20MCA245 Mini Project
	20MCA 246 Main Project
Gender	20MCA192a IPR and Cyber Laws
	20MCA244 Seminar
	20MCA245 Mini Project
	20MCA 246 Main Project
Human Value	20MCA107 Advanced Software Engineering
	20MCA192a IPR and Cyber Laws
	20MCA263 Cybersecurity and Cryptography
	20MCA244 Seminar
	20MCA245 Mini Project
	20MCA 246 Main Project
Environment and Sustainability	20MCA107 Advanced Software Engineering
	20MCA244 Seminar
	20MCA245 Mini Project
	20MCA 246 Main Project

Please on the link for detailed syllabus of these courses