SRI KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY

An Autonomous Institution Affiliated to Anna University

Kuniamuthur

Coimbatore - 641 008

VISION AND MISSION OF THE DEPARTMENT

Vision

World class education in the fields of automation and simulation to make Mechatronics Engineering the most preferred program among engineering aspirants

Mission

To impart knowledge to the students participating in the program by providing

M1: Expert Faculty to teach, inspire, mentor and motivate.

M2: Excellent Infrastructure with facilities to learn Mechatronics, research and experiment.

M3: Motivation towards self-learning, social responsibility and entrepreneurship.

M4: Exposure to the latest technologies through industry-institute interaction.

M5: Environment to develop their innovative thoughts, moral values, communication and multi-disciplinary skills.

Programme Outcomes (POs): -

At the time of their graduation students of Mechatronics Engineering Programme should be in possession of the following Programme Outcomes

PO1 **Engineering knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2 **Problem analysis**: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3 **Design/development of solutions**: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4   **Conduct investigations of complex problems**: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5   **Modern tool usage**: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6   **The engineer and society**: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7   **Environment and sustainability**: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8   **Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9   **Individual and team work**: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10   **Communication**: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11   **Project management and finance**: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12   **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Programme Educational Objectives (PEOs):-

The following Programme Educational Objectives are designed based on the department mission

PEO1 To apply knowledge of Mathematics, Science and Mechatronics Engineering to solve contemporary engineering problems in the field of automation.

PEO2 To design, analyze, fabricate and test smart products.

PEO3 To exhibit the skills of simulation and experimentation using advanced engineering tools of industrial standards.

PEO4 To communicate and develop strong interpersonal abilities to prepare them for placements and higher studies.

PEO5 To be self-motivated towards lifelong learning and entrepreneurship.

Mapping of POs to PEOs

Programme Educational Objectives	Programme Outcomes											
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
PEO 1	3	2	3	1	2	3	2	2	3	3	3	2
PEO 2	3	3	2	2	3	2	2	1	2	2	2	3
PEO 3	3	3	3	2	1	3	2	2	2	3	1	3
PEO 4	3	2	3	1	2	3	2	2	2	3	3	3
PEO 5	3	3	3	1	2	3	3	2	2	3	1	3

1	Reasonably agreed	**2**	Moderately agreed	**3**	Strongly agreed

Programme Specific Outcomes (PSO): -

At the end of the Programme, Graduate shall have

PSO1 Design, simulate and create automation systems for various applications.

PSO2 Apply the Knowledge of Robotics for addressing Societal, health and Safety Issues

SRI KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY, COIMBATORE-641008
B.E. MECHATRONICS ENGINEERING
REGULATION 2022 (For 2024-28 Batch)
CHOICE-BASED CREDIT SYSTEM
I – VIII SEMESTER CURRICULUM AND SYLLABI

SEMESTER I							
S. No.	Course Code	Course	L/T/P	Contact hrs/week	Credit	Ext/Int	Category
1.	23MT101	Production Technology	3/0/0	3	3	60/40	PCC
2.	23MT102	Sensors, Measurements, and Instrumentation	3/0/0	3	3	60/40	PCC
3.	23MA101	Mathematics I	3/1/0	4	4	60/40	BSC
4.	23IT101	Application Development Practices	1/0/4	5	3	50/50	ESC
5.	23CS101	Problem Solving using C++	1/0/4	5	3	50/50	ESC
6.	23EN101	Oral and Written Communication Skills	2/0/2	4	3	50/50	HSMC
7.	23MT103	Production Technology Laboratory	0/0/2	2	1	40/60	PCC
8.	23MT202	Computer Aided Drawing Laboratory for Mechatronics	0/0/2	2	1	40/60	PCC
9.	23TA101	Heritage of Tamils / தமிழர் மரபு	3 Weeks		1	60/40	HSMC
10.	23MC101	Mandatory Course I: Induction Programme	3 Weeks		0	0/100	MC
Total			**13/1/14**	**28**	**22**	**1000**	

SEMESTER II							
S. No.	Course Code	Course	L/T/P	Contact hrs/week	Credit	Ext/Int	Category
1.	23MT201	Applied Mechanics	3/0/0	3	3	60/40	PCC
2.	23EC202	Digital System Design	3/0/0	3	3	60/40	PCC
3.	23MA201	Mathematics II	3/1/0	4	4	60/40	BSC

S. No.	Course Code	Course	L/T/P	Contact hrs/week	Credit	Ext/Int	Category
4.	23AS101	Applied Science	4/0/0	4	4	60/40	BSC
5.	23CD201	Database Management Systems	1/0/4	5	3	50/50	ESC
6.	23IT211	Introduction to Python Programming	1/0/4	5	3	50/50	ESC
7.	23AS102	Applied Science Laboratory	0/0/4	4	2	40/60	BSC
8.	23EC204	Digital System Design Laboratory	0/0/2	2	1	40/60	PCC
9.	23TA201	Tamils and Technology / தமிழரும் தொழில்நுட்பமும்	3 Weeks		1	60/40	HSMC
10.	23MC1XX	Mandatory Course – II (EVS)	3 Weeks		0	0/100	MC
Total			**15/1/14**	**30**	**24**	**1000**	

SEMESTER III							
S. No.	Course Code	Course	L/T/P	Contact hrs/week	Credit	Ext/Int	Category
1.	23MT301	Theory of Machines	3/0/0	3	3	60/40	PCC
2.	23MT302	Basics of Mechatronics Systems	3/0/0	3	3	60/40	PCC
3.	23GE301	Universal Human Values	3/0/0	3	3	60/40	HSMC
4.	23MA302	Mathematics III	3/1/0	4	4	60/40	BSC
5.	23EC302	Operating Systems for Electronic Devices	3/0/2	5	4	50/50	PCC
6.	23CS311	Fundamentals of Java Programming	1/0/4	5	3	50/50	PCC
7.	23MT303	Mechanics of Machines and Materials Laboratory	0/0/2	2	1	40/60	PCC
8.	23MT304	Idea Lab for Mechatronics	0/0/2	2	1	40/60	PCC
Total			**16/1/10**	**27**	**22**	**800**	

SEMESTER IV

S. No.	Course Code	Course	L/T/P	Contact hrs/week	Credit	Ext/Int	Category
1.	23MT401	Machine Design	3/0/0	3	3	60/40	PCC
2.	23MT402	Electrical Machines for Mechatronics	3/0/0	3	3	60/40	PCC
3.	23MT403	Fluid and Thermal Engineering	3/0/0	3	3	60/40	PCC
4.	23MT404	Basics of Digital Signal Processing	3/0/0	3	3	60/40	PCC
5.	23MTXXX	Professional Elective-I	3/0/0	3	3	60/40	PEC
6.	23EC403	Embedded C++	3/0/2	5	4	50/50	PCC
7.	23MT405	Fluid and Thermal Engineering Laboratory	0/0/2	2	1	40/60	PCC
8.	23MC1XX	Mandatory Course – III	3 Weeks		0	0/100	MC
Total			**18/0/4**	**22**	**20**	**800**	

SEMESTER V

S. No.	Course Code	Course	L/T/P	Contact hrs/week	Credit	Ext/Int	Category
1.	23MT501	Control Systems for Mechatronics	3/0/0	3	3	60/40	PCC
2.	23MT502	Robotic Systems	3/0/0	3	3	60/40	PCC
3.	23MT503	Autotronics and Vehicle Intelligence	3/0/0	3	3	60/40	PCC
4.	23MTXXX	Professional Elective-II	3/0/0	3	3	60/40	PEC
5.	23MT504	Hydraulics and Pneumatics System	3/0/2	5	4	50/50	PCC
6.	23XXXXX	Open Elective-I	3/0/0	3	3	60/40	OEC
7.	23MT505	Robotic Systems Laboratory	0/0/2	2	1	40/60	PCC
8.	23MT506	Electrical Machines and Controls Laboratory	0/0/2	2	1	40/60	PCC
9.	23MT507	Mini Project-I	0/0/2	2	1	40/60	PROJ
Total			**18/0/8**	**26**	**22**	**900**	

		SEMESTER VI					
S. No.	Course Code	Course	L/T/P	Contact hrs/week	Credit	Ext/Int	Category
1.	23MT601	Industrial Automation	3/0/0	3	3	60/40	PCC
2.	23MT602	Computer Networks and Cyber Security	3/0/0	3	3	60/40	PCC
3.	23XXXXX	Emerging Elective – I	3/0/0	3	3	60/40	EEC
4.	23MTXXX	Professional Elective – III	3/0/0	3	3	60/40	PEC
5.	23XXXXX	Open Elective-II	3/0/0	3	3	60/40	OEC
6.	23MT603	Artificial Intelligence for Robotics	3/0/2	5	4	50/50	PCC
7.	23MT604	Industrial Automation Laboratory	0/0/2	2	1	40/60	PCC
8.	23MC1XX	Mandatory Course – IV	3 Weeks		0	0/100	MC
Total			**18/0/4**	**22**	**20**	**800**	

		SEMESTER VII					
S. No.	Course Code	Course	L/T/P	Contact hrs/week	Credit	Ext/Int	Category
1.	23MT701	Computer Integrated Manufacturing	3/0/0	3	3	60/40	PCC
2.	23MT702	Industrial Management and Professional Ethics	3/0/0	3	3	60/40	HSMC
3.	23XXXXX	Emerging Elective – II	3/0/0	3	3	60/40	EEC
4.	23MTXXX	Professional Elective – IV	3/0/0	3	3	60/40	PEC
5.	23MTXXX	Professional Elective – V	3/0/0	3	3	60/40	PEC
6.	23MTXXX	Professional Elective – VI	3/0/0	3	3	60/40	PEC
7.	23MT703	Computer Aided Engineering Laboratory	0/0/2	2	1	40/60	PCC
8.	23EES01	Employability Enhancement Skills	-	-	2	0/100	EES
Total			**18/0/2**	**20**	**21**	**800**	

SEMESTER VIII							
S. No.	Course Code	Course	L/T/P	Contact hrs/week	Credit	Ext/Int	Category
1.	23MT801	Industrial Project	0/0/24	24	12	40/60	PROJ
		Total	**0/0/24**	**24**	**12**	**100**	

PROFESSIONAL ELECTIVES (PE)						
VERTICAL 1	*VERTICAL 2*	*VERTICAL 3*	*VERTICAL 4*	*VERTICAL 5*	*VERTICAL 6*	
APPLIED ROBOTICS	**DESIGN AND MANUFACTURING**	**SMART MOBILITY SYSTEMS**	**INTELLIGENCE SYSTEMS**	**AUTOMATION**	**AVIONICS AND DRONE TECHNOLOGY**	**EMERGING ELECTIVE**
23MT901- Mobile Robotics	23MT907- Product design	23MT913-Advanced Driver Assistance Systems	23MT919 - Introduction to Machine Learning	23MT925-Embedded System for Automation	23MT931-Avionics	23MT006-Collaborative Robotics
23MT902-Agricultural Robotics and Automation	23MT908- Robots and system in smart Manufacturing	23MT914-Vehicle Ergonomics	23MT920-Principles of AI and Expert Systems	23MT926-Robotic Process Automation	23MT932-Drone Technologies	23MT007-Design Thinking and Entrepreneur Development
23MT903- Bio-Mechatronics	23MT909- CNC Machines and Part Programming	23MT915-Autonomous Underwater Vehicles	23MT921-Condition Monitoring and Fault Diagnostics	23MT927-Industrial Networking	23MT933-Navigation and Communication System	23MT008- Digital Twin and Industry 5.0
23MT904- Robot Operating System	23MT910-Additive Manufacturing Processes	23MT916-Electric and Hybrid Vehicles	23MT922-Intelligent Control System	23MT928-Virtual Instrumentation and its Applications	23MT934-Unmanned Aerial Vehicles	23MT009-Social Robotics
23MT905- Micro Robotics	23MT911-Robot and Machine Elements Design	23MT917-Automobile Engineering	23MT923-Immersive Technologies and Haptics	23MT929-Power Electronics and Drives	23MT935-Guidance and Control	23MT010 Cognitive Robotics
23MT906 Humanoids	23MT912- Design for X	23MT918-Battery Management System	23MT924-Computer Vision and Deep Learning	23MT930-Internet of Things for Mechatronics	23MT936-Aircraft Mechatronics	23MT011-Data Analytics for Robotics and Automation

S. No.	Course Code	Course Title	L/T/P	Contact Hrs/Wk	Credits	Category
Stream I: APPLIED ROBOTICS						
1.	23MT901	Mobile Robotics	3/0/0	3	3	PEC
2.	23MT902	Agricultural Robotics and Automation	3/0/0	3	3	PEC
3.	23MT903	Bio-Mechatronics	3/0/0	3	3	PEC
4.	23MT904	Robot Operating System	3/0/0	3	3	PEC
5.	23MT905	Micro Robotics	3/0/0	3	3	PEC
6.	23MT906	Humanoids	3/0/0	3	3	PEC

S. No	Course Code	Course Title	L/T/P	Contact Hrs/ Wk	Credits	Category
Stream II: DESIGN AND MANUFACTURING						
1.	23MT907	Product design	3/0/0	3	3	PEC
2.	23MT908	Robots and system in smart Manufacturing	3/0/0	3	3	PEC
3.	23MT909	CNC Machines and Part Programming	3/0/0	3	3	PEC
4.	23MT910	Additive Manufacturing Processes	3/0/0	3	3	PEC
5.	23MT911	Robot and Machine Elements Design	3/0/0	3	3	PEC
6.	23MT912	Design for X	3/0/0	3	3	PEC

S. No	Course Code	Course Title	L/T/P	Contact Hrs/Wk	Credits	Category
Stream III: SMART MOBILITY SYSTEMS						
1.	23MT913	Advanced Driver Assistance Systems	3/0/0	3	3	PEC
2.	23MT914	Vehicle Ergonomics	3/0/0	3	3	PEC
3.	23MT915	Autonomous Underwater Vehicles	3/0/0	3	3	PEC
4.	23MT916	Electric and Hybrid Vehicles	3/0/0	3	3	PEC
5.	23MT917	Automobile Engineering	3/0/0	3	3	PEC
6.	23MT918	Battery Management System	3/0/0	3	3	PEC

S. No	Course Code	Course Title	L/T/P	Contact Hrs/Wk	Credits	Category
Stream IV: INTELLIGENCE SYSTEMS						
1.	23MT919	Introduction to Machine Learning	3/0/0	3	3	PEC
2.	23MT920	Principles of AI and Expert Systems	3/0/0	3	3	PEC
3.	23MT921	Condition Monitoring and Fault Diagnostics	3/0/0	3	3	PEC
4.	23MT922	Intelligent Control System	3/0/0	3	3	PEC
5.	23MT923	Immersive Technologies and Haptics	3/0/0	3	3	PEC
6.	23MT924	Computer Vision and Deep Learning	3/0/0	3	3	PEC

S. No	Course Code	Course Title	L/T/P	Contact Hrs/Wk	Credits	Category
Stream V: AUTOMATION						
1.	23MT925	Embedded System for Automation	3/0/0	3	3	PEC
2.	23MT926	Robotic Process Automation	3/0/0	3	3	PEC
3.	23MT927	Industrial Networking	3/0/0	3	3	PEC
4.	23MT928	Virtual Instrumentation and its Applications	3/0/0	3	3	PEC
5.	23MT929	Power Electronics and Drives	3/0/0	3	3	PEC
6.	23MT930	Internet of Things for Mechatronics	3/0/0	3	3	PEC

S. No	Course Code	Course Title	L/T/P	Contact Hrs/Wk	Credits	Category
Stream VI: AVIONICS AND DRONE TECHNOLOGY						
1.	23MT931	Avionics	3/0/0	3	3	PEC
2.	23MT932	Drone Technologies	3/0/0	3	3	PEC
3.	23MT933	Navigation and Communication System	3/0/0	3	3	PEC
4.	23MT934	Unmanned Aerial Vehicles	3/0/0	3	3	PEC
5.	23MT935	Guidance and Control	3/0/0	3	3	PEC
6.	23MT936	Aircraft Mechatronics	3/0/0	3	3	PEC

OPEN ELECTIVES (OE): Offered to other departments

S. No.	Course Code	Course Title	L/T/P	Contact hrs./Wk.	Credits	Category
1.	23MT001	Basics of Robotics	3/0/0	3	3	OEC
2.	23MT002	Basics of Automation Systems	3/0/0	3	3	OEC
3.	23MT003	Smart Sensors for IoT	3/0/0	3	3	OEC
4.	23MT004	Drone Technology	3/0/0	3	3	OEC
5.	23MT005	Fundamentals of Arduino and Raspberry pi	3/0/0	3	3	OEC

EMERGING ELECTIVES (EE): Offered to MCT

S. No.	Course Code	Course Title	L/T/P	Contact hrs./Wk.	Credits	Category
1.	23MT006	Collaborative Robotics	3/0/0	3	3	EEC
2.	23MT007	Design Thinking and Entrepreneur Development	3/0/0	3	3	EEC
3.	23MT008	Digital Twin and Industry 5.0	3/0/0	3	3	EEC
4.	23MT009	Social Robotics	3/0/0	3	3	EEC
5.	23MT010	Cognitive Robotics	3/0/0	3	3	EEC
6.	23MT011	Data Analytics for Robotics and Automation	3/0/0	3	3	EEC

MANDATORY COURSES (MC):

S. No.	Course Code	Course Title	L/T/P	Contact hrs./Wk.	Credits	Category
1.	23MC101	Induction Programme	3 Weeks		0	MC
2.	23MC102	Environmental Sciences	3 Weeks		0	MC
3.	23MC103	Soft Skills	3 Weeks		0	MC
4.	23MC104	Management Organizational Behavior	3 Weeks		0	MC

S. No.	Course Code	Course Title			Credits	Category
5.	23MC105	General Aptitude	3 Weeks		0	MC
6.	23MC106	Life Skills and Ethics	3 Weeks		0	MC
7.	23MC107	Stress Management	3 Weeks		0	MC
8.	23MC108	Constitution of India	3 Weeks		0	MC
9.	23MC109	Essence of Indian Traditional Knowledge	3 Weeks		0	MC
10.	23MC110	Biology	3 Weeks		0	MC

VALUE ADDED COURSES (VAC):

S. No.	Course Code	Course Title	L/T/P	Contact hrs./Wk.	Credits	Category
1	23VA600	Solidworks	0/0/2	2	1	VAC
2	23VA601	MATLAB programming	0/0/2	2	1	VAC
3	23VA602	Android Studio	0/0/2	2	1	VAC
4	23VA603	Intellectual Property Rights & Entrepreneurship	2/0/0	2	2	VAC
5	23VA604	Financial Literacy	2/0/0	2	2	VAC
6	23VA605	Automation Studio	0/0/2	2	1	VAC
7	23VA606	Electric Vehicle Design & Fabrication	2/0/0	2	2	VAC
8	23VA607	Mastering Embedded Systems: Unleash the Power of Controller Boards	0/0/2	2	1	VAC
9	23VA608	Programming with Labview	0/0/2	2	1	VAC

HUMANITIES AND MANAGEMENT COURSES (11 Credits)

S. No.	Course Code	Course Title	L/T/P	Contact hrs./Wk.	Credits	Category
1.	23EN101	Oral and Written Communication Skills	2/0/2	4	3	HSMC
2.	23TA101	Heritage of Tamils / தமிழர் மரபு	3 Weeks		1	HSMC

S. No.	Course Code	Course Title		L/T/P	Contact hrs./Wk.	Credits	Category
3.	23TA201	Tamils and Technology / தமிழரும் தொழில்நுட்பமும்		3 Weeks		1	HSMC
4.	23GE301	Universal Human Values		3/0/0	3	3	HSMC
5.	23MT702	Industrial Management and Professional Ethics		3/0/0	3	3	HSMC

BASIC SCIENCE COURSES (18 Credits)

S. No.	Course Code	Course Title	L/T/P	Contact hrs./Wk.	Credits	Category
1.	23MA101	Mathematics I	3/1/0	4	4	BSC
2.	23AS101	Applied Science	4/0/0	4	4	BSC
3.	23AS102	Applied Science Laboratory	0/0/4	4	2	BSC
4.	23MA201	Mathematics II	3/1/0	4	4	BSC
5.	23MA302	Mathematics III	3/1/0	4	4	BSC

ENGINEERING SCIENCE COURSES (12 Credits)

S. No.	Course Code	Course Title	L/T/P	Contact hrs./Wk.	Credits	Category
1.	23IT101	Application Development Practices	1/0/4	5	3	ESC
2.	23CS101	Problem Solving using C++	1/0/4	5	3	ESC
3.	23CD201	Database Management Systems	1/0/4	5	3	ESC
4.	23IT211	Introduction to Python Programming	1/0/4	5	3	ESC

PROFESSIONAL CORE COURSES (75 Credits)

S. No.	Course Code	Course Title	L/T/P	Contact hrs./Wk.	Credits	Category
1.	23MT101	Production Technology	3/0/0	3	3	PCC
2.	23MT102	Sensors, Measurements, and Instrumentation	3/0/0	3	3	PCC
3.	23MT103	Production Technology Laboratory	0/0/2	2	1	PCC
4.	23MT201	Applied Mechanics	3/0/0	3	3	PCC
5.	23MT202	Computer Aided Drawing Laboratory for Mechatronics	0/0/2	2	1	PCC

6.	23EC202	Digital System Design	3/0/0	3	3	PCC
7.	23EC204	Digital System Design Laboratory	0/0/2	2	1	PCC
8.	23MT301	Theory of Machines	3/0/0	3	3	PCC
9.	23MT302	Basics of Mechatronics Systems	3/0/0	3	3	PCC
10.	23CS311	Fundamentals of Java Programming	1/0/4	5	3	PCC
11.	23EC302	Operating Systems for Electronic Devices	3/0/2	5	4	PCC
12.	23MT303	Mechanics of Machines and Materials Laboratory	0/0/2	2	1	PCC
13.	23MT304	Idea Lab for Mechatronics	0/0/2	2	1	PCC
14.	23MT401	Machine Design	3/0/0	3	3	PCC
15.	23MT402	Electrical Machines for Mechatronics	3/0/0	3	3	PCC
16.	23MT403	Fluid and Thermal Engineering	3/0/0	3	3	PCC
17.	23MT404	Basics of Digital Signal Processing	3/0/0	3	3	PCC
18.	23EC403	Embedded C++	3/0/2	5	4	PCC
19.	23MT405	Fluid and Thermal Engineering Laboratory	0/0/2	2	1	PCC
20.	23MT501	Control Systems for Mechatronics	3/0/0	3	3	PCC
21.	23MT502	Robotic Systems	3/0/0	3	3	PCC
22.	23MT503	Autotronics and Vehicle Intelligence	3/0/0	3	3	PCC
23.	23MT504	Hydraulics and Pneumatics System	3/0/2	5	4	PCC
24.	23MT505	Robotic Systems Laboratory	0/0/2	2	1	PCC
25.	23MT506	Electrical Machines and Controls Laboratory	0/0/2	2	1	PCC
26.	23MT601	Industrial Automation	3/0/0	3	3	PCC
27.	23MT602	Computer Networks and Cyber Security	3/0/0	3	3	PCC
28.	23MT603	Artificial Intelligence for Robotics	3/0/2	5	4	PCC
29.	23MT604	Industrial Automation Laboratory	0/0/2	2	1	PCC
30.	23MT701	Computer Integrated Manufacturing	3/0/0	3	3	PCC
31.	23MT703	Computer Aided Engineering Laboratory	0/0/2	2	1	PCC

Category wise Comparison of Courses and Credits

S. No.	Category	AICTE- MCT 2020		SKCET-MCT R2022	
		No of Courses	No. of Credits	No of Courses	No. of Credits
1.	Humanities (HSMC)	4	12	5	11
2.	Basic Sciences (BSC)	5	21	5	18
3.	Engineering Sciences (ESC)			4	12
4.	Professional Core (PCC)	44	101	31	77
5.	Professional Electives (PEC)	2	6	6	18
6.	Open Electives (OEC)/ Emerging Elective (EEC)	2	6	4	12
7.	Project Work (PROJ)	7	17	2	14
8.	Employability Enhancement Skill (EES)			1	2
9.	Mandatory Courses (MC)	3	-	4	-
	Total	**67**	**163**	**62**	**163**

Scheme of Credit Distribution- Summary

S. No	Stream	Credits/Semester								Credits	%
		I	II	III	IV	V	VI	VII	VIII		
1.	Humanities (HSMC)	4	1	3				3		**11**	**6.75**
2.	Basic Sciences (BSC)	4	10	4						**18**	**11.04**
3.	Engineering Sciences (ESC)	6	6							**12**	**7.36**
4.	Professional Core (PCC)	8	7	15	14	18	11	4		**77**	**47.24**
5.	Professional Electives (PEC)				3	3	3	9		**18**	**11.04**
6.	Open Electives (OEC)/ Emerging Elective (EEC)				3		6	3		**12**	**7.36**
7.	Project Work (PROJ)					1			12	**13**	**7.98**
8.	Employability Enhancement Skill (EES)							2		**2**	**1.23**
9.	Mandatory Courses (MC)										
	Total	**22**	**24**	**22**	**20**	**22**	**20**	**21**	**12**	**163**	**100**