VJEC B. Tech. CURRICULUM 2024

B. Tech

Curriculum (2024)- Semester I to VIII

ELECTRICAL AND ELECTRONICS ENGINEERING

Branch Code: EE

Group - B

FIRST SEMESTER (July-December): Group B														
10 Days Compulsory Induction Program and UHV														
Sl. No:	**Slot**	**Course Code**	**Course Type**	**Course Category**	**Course Title (Course Name)**	**Credit Structure**				**SS**	**Total Marks**		**Credits**	**Hrs./Week**
						L	**T**	**P**	**R**		**CIA**	**ESE**		
1	A	GYMAT101	BSC	GC	Mathematics for Electrical Science and Physical Science-1	3	0	0	0	4.5	40	60	3	3
2	B S1/S2	GBPHT121	BSC	GC	Physics for Electrical Science	3	0	2	0	5.5	40	60	4	5
		GXCYT122			Chemistry for Computer Science and Electrical Science									
3	C	GXEST103	ESC	GC	Engineering Graphics and Computer Aided Drawing.	2	0	2	0	4	40	60	3	4
4	D	GXEST104	ESC	GC	Introduction to Electrical & Electronics Engineering (Part1: Electrical Engineering)	2	0	0	0	3	20	30	2+2=4	4
					(Part2: Electronics Engineering)	2	0	0	0	3	20	30		
5	F	UCEST105	ESC	UC	Algorithmic Thinking with Python	3	0	2	0	5.5	40	60	4	5
6	L	GXESL106	ESC	GC	Basic Electrical and Electronics Engineering Workshop	0	0	2	0	1	50	50*	1	2
7	I** S1/ S2	UCHWT127	HWP	UC	Health and Wellness	1	0	1	0	0	50	0	1	2/3
		UCHUT128	HMC*		Life Skills and Professional Communication	2	0	1	0	3.5	100	0		
8	S_1/ S_2	UCSEM129	SEC	UC	Skill Enhancement Course: Digital101 (NASSCOM)	MOOC				2			-	
Total										**30/ 32**			**20**	**25/ 26**
Bridge Course (Mathematics or Introduction to Computer Science) *: Total 15Hrs.														

Internal valuation by concerned department.

****No Grade Points will be awarded for the MOOC course and I slot course.***

- L-T-P-R: Lecture-Tutorial-Practical-Project
- SS (Self Study) Hours=1.5L+0.5T+0.5P+R
- CIA: Continuous Internal Assessment, ESE: End Semester Examination

Note: *Physics, Chemistry, Health and Wellness & Life Skill and Professional Communication can be offered in both Semester 1 (S1) and Semester 2 (S2).*

Digital 101 (NASSCOM)		
Sl. No:	**Technologies Covered**	**Hours**
1	Artificial intelligence and Big Data Analytics (AI/BDA)	11
2	Internet of Things (IoT)	2.5
3	Cyber Security	2.5
4	Block Chain	2.5
5	Robotic Process Automation	1.5
6	Augmented Reality and Virtual Reality (AR and VR)	2.5
7	Cloud Computing	2.5
8	3 D Printing and Modelling	2
9	Web, Mobile Dev and Marketing	2
10	Responsible AI	1
	Total Hours	**30**

Skill Enhancement Course: *Digital 101 is an introductory Massive Open Online Course (MOOC) offered by NASSCOM. It is designed to provide students with foundational knowledge and skills in digital technologies, preparing them for further studies and careers in the digital domain. By incorporating the Digital 101 course into the curriculum, we ensure that all students gain valuable digital skills early in their academic journey, enhancing their readiness for advanced courses and future careers in technology.*

Course Registration and Completion*:*

- *Students have the flexibility to register and complete the Digital 101 course either in their first semester (S1) or second semester (S2).*
- *The credit for this course (1credit) will be officially recorded in the second semester grade card.*

SECOND SEMESTER (January-June) Group B														
Sl. No:	**Slot**	**Course Code**	**Course Type**	**Course Category**	**Course Title (Course Name)**	**Credit Structure**				**SS**	**Total Marks**		**Credits**	**Hrs./Week**
						L	**T**	**P**	**R**		**CIA**	**ESE**		
1	A	GYMAT201	BSC	GC	Mathematics for Electrical Science and Physical Science-2	3	0	0	0	4.5	40	60	3	3
2	B S1/ S2	GBPHT121	BSC	GC	Physics for Electrical Science	3	0	2	0	5.5	40	60	4	5
		GXCYT122			Chemistry for Computer Science and Electrical Science									
3	C	GBEST213	ESC	GC	Engineering Mechanics	3	0	0	0	4.5	40	60	3	3
4	D	GXEST204	ESC	GC	Programming in C	3	0	2	0	5.5	40	60	4	5
5	E	PCEET205	PC	PC	Measurements and Instrumentation	3	1	0	0	5	40	60	4	4
6	F	UCEST206	ESC	UC	Engineering Entrepreneurship & IPR	3	0	0	0	4.5	60	40	3	3
7	I** S1/ S2	UCHWT127	HWP	UC	Health and Wellness	1	0	1	0	0	50	0	1	2/3
		UCHUT128	HMC		Life Skills and Professional Communication	2	0	1	0	3.5	100	0		
8	L	GXESL208	ESC	GC	IT Workshop	0	0	2	0	1	50	50*	1	2
	S_1/ S_2	UCSEM129	SEC	UC	Skill Enhancement Course: Digital101 (NASSCOM)	MOOC							1	
Total										**34**			**24**	**27/ 28**

THIRD SEMESTER (July-December)														
Sl. No:	**Slot**	**Course Code**	**Course Type**	**Course Category**	**Course Title (Course Name)**	**Credit Structure**				**SS**	**Total Marks**		**Credits**	**Hrs./ Week**
						L	**T**	**P**	**R**		**CIA**	**ESE**		
1	A	GYMAT301	BSC	GC	Mathematics for Electrical Science and Physical Science-3	3	0	0	0	4.5	40	60	3	3
2	B	PCEET302	PC	PC	Circuits & Networks	3	1	0	0	5	40	60	4	4
3	C	PCEET303	PC	PC	DC Machines & Transformers	3	1	0	0	5	40	60	4	4
4	D	PBEET304	PC-PBL	PB	Analog Electronics	3	0	0	1	5.5	60	40	4	4
5	F	GYEST305	ESC	GC	Introduction to Artificial Intelligence and Data Science	3	1	0		5	40	60	4	4
6	G S3/ S4	UCHUT346	HMC	UC	Economics for Engineers	2	0	0	0	3	50	50	2	2
		UCHUT347			Engineering Ethics and Sustainable Development									
7	L	PCEEL307	PCL	PC	Circuits and Measurements Lab	0	0	3	0	1.5	50	50	2	3
8	Q	PCEEL308	PCL	PC	Analog Electronics lab	0	0	3	0	1.5	50	50	2	3
9	R/M		VAC		Remedial/Minor Course	3	1	0	0	5			4*	4*
Total										**31/ 36**			**25/29***	**27/ 31***
Bridge Course for Lateral Entry Students: Total 15 Hrs.														

FOURTH SEMESTER (January-June)														
Sl. No:	**Slot**	**Course Code**	**Course Type**	**Course Category**	**Course Title (Course Name)**	**Credit Structure**				**SS**	**Total Marks**		**Credits**	**Hrs./ Week**
						L	**T**	**P**	**R**		**CIA**	**ESE**		
1	A	GBMAT401	BSC	GC	Mathematics for Electrical Science-4	3	0	0	0	4.5	40	60	3	3
2	B	PCEET402	PC	PC	Synchronous & Induction Machines	3	1	0	0	5	40	60	4	4
3	C	PCEET403	PC	PC	Power Electronics and Drives	3	1	0	0	5	40	60	4	4
4	D	PBEET404	PC-PBL	PB	Digital Electronics	3	0	0	1	5.5	60	40	4	4
5	E	PEEET41N	PE	PE	PE-1	3	0	0	0	4.5	40	60	3	3
6	G S3/S4	UCHUT346	HMC	UC	Economics for Engineers	2	0	0	0	3	50	50	2	2
		UCHUT347			Engineering Ethics and Sustainable Development									
7	L	PCEEL407	PCL	PC	DC Machines & Transformers Lab	0	0	3	0	1.5	50	50	2	3
8	Q	PCEEL408	PCL	PC	Power Electronics and Drives Lab	0	0	3	0	1.5	50	50	2	3
9	R/M/H		VAC		Remedial/Minor/Honours Course	3	1	0	0	5			4*	4*
Total										**31/ 36**			**24/ 28***	**26/ 30***

Note: *Engineering Economics and Engineering Ethics and Sustainable Development shall be offered in both S3 and S4. Institutions can advise students belonging to about 50% of the number of branches in the Institution to opt for Engineering Economics in S3 and Engineering Ethics & Sustainable Development in S4 and vice versa.*

PROGRAM ELECTIVE 1 -PEEET41N- SLOT E		
Sl. No:	**Course Code**	**Course Title (Course Name)**
1	PEEET411	Electronic Instrumentation
2	PEEET412	Renewable Energy Sources
3	PEEET413	Mathematics for Machine Learning
4	PEEET414	Theory of Computation
5	PEEET416	Computer Organization
6	PEEET417	Solid State Devices
7	PEEET418	Illumination Technology
8	PEEET419	Object Oriented Programming

FIFTH SEMESTER (July-December)															
Sl. No:	**Slot**	**Course Code**	**Course Type**	**Course Category**	**Course Title (Course Name)**	**Credit Structure**				**SS**	**Total Marks**		**Credits**	**Hrs./ Week**
						L	**T**	**P**	**R**		**CIA**	**ESE**		
1	A	PCEET501	PC	PC	Power Generation, Transmission and Protection	3	1	0	0	5	40	60	4	4
2	B	PCEET502	PC	PC	Electromagnetic Theory	3	1	0	0	5	40	60	4	4
3	C	PCEET503	PC	PC	Signals and Systems	3	0	0	0	4.5	40	60	3	3
4	D	PBEET504	PC-PBL	PB	Microprocessors And Embedded Systems	3	0	0	1	5.5	60	40	4	4
5	E	PEEET52N	PE	PE	PE-2	3	0	0	0	4.5	40	60	3	3
6	I*	UCHUM506	HMC	UC	Constitution of India (MOOC)	-	-	-	-	2	-	-	1	-
7	L	PCEEL507	PCL	PC	AC Machines Lab	0	0	3	0	1.5	50	50	2	3
8	Q	PCEEL508	PCL	PC	Microprocessors and Embedded Systems Lab	0	0	3	0	1.5	50	50	2	3
9	R/M/H		VAC		Remedial/Minor/ Honours Course	3	1	0	0	5			4*	4*
	S_5/ S_6	Industrial Visit (Maximum 12 Days are permitted, not Exceeding more than 6 Working Days) / Industrial Training												
Total										**30/ 35**			**23/27***	**24/28***

No Grade Points will be awarded for the MOOC course and I slot course.

Industrial Training:
Students who are not participating in the industrial visit must attend industrial training during that period.

PROGRAM ELECTIVE 2 -PEEET52N- SLOT E		
Sl. No:	**Course Code**	**Course Title (Course Name)**
1	PEEET521	Energy Storage Systems
2	PEEET522	Electric Vehicles
3	PEEET523	Digital System Design
4	PEEET524	Software Engineering
5	PEEET526	Data Structures
6	PEEET527	Introduction to Machine Learning
7	PEEET528	Computer Network Systems

SIXTH SEMESTER (January-June)														
Sl. No:	**Slot**	**Course Code**	**Course Type**	**Course Category**	**Course Title (Course Name)**	**Credit Structure**				**SS**	**Total Marks**		**Credits**	**Hrs/ Week**
						L	**T**	**P**	**R**		**CIA**	**ESE**		
1	A	PCEET601	PC	PC	Control Systems	3	0	0	0	4.5	40	60	3	3
2	B	PCEET602	PC	PC	Electrical System Design and Estimation	3	0	0	0	4.5	40	60	3	3
3	C	PEEET63N	PE	PE	PE-3	3	0	0	0	4.5	40	60	3	3
4	D	PBEET604	PC-PBL	PB	Core-PBL-4	3	0	0	1	5.5	60	40	4	4
5	F	G(B/C) EST605	ESC	GC	Design Thinking and Product Development (Group Specific Syllabus)	2	0	0	0	3	40	60	2	2
6	O	OEXXT61N/ IEXXT61N	OE/ILE	OE/IE	OE/ILE-1	3	0	0	0	4.5	40	60	3	3
7	L	PCEEL607	PCL	PC	Control System Lab	0	0	3	0	1.5	50	50	2	3
8	P	PCEEP608	PWS	PC	Mini Project: Socially Relevant Project	0	0	3	0	1.5	50	50	2	3
9	Q	PCEEL609	PCL	PC	Power System Lab	0	0	2	0	1	50	50	1	2
10	R/ M/ H		VAC		Remedial/Minor/ Honours Course	3	0	0	0	4.5			3*	3*
	S5/ S6	Industrial Visit Maximum of 12 Days are permitted, not exceedingly more than 6 Working Days) /Industrial Training												
Total										**32/ 36**			**23/26***	**26/29***

Note: Open Electives are such courses which will be offered by other departments. Like CSE department students have to opt open electives from ECE/ME/EEE etc. departments.

Industrial Training: *Students who are not participating in the industrial visit must attend industrial training during that period.*

PROGRAM ELECTIVE 3 -PEEET63N- SLOT C		
Sl. No:	**Course Code**	**Course Title (Course Name)**
1	PEEET631	Digital Protection of Power Systems
2	PEEET632	Operating Systems
3	PEEET633	High Voltage Engineering
4	PEEET634	Internet of Things
5	PEEET636	Digital Signal Processing
6	PEEET637	Cloud Computing
7	PEEET638	Optimization Techniques

OPEN ELECTIVE 1-OEEET61N- SLOT O		
Sl. No:	**Course Code**	**Course Title (Course Name)**
1	OEEET611	Introduction to Control Systems
2	OEEET612	Energy Management
3	OEEET613	Renewable Energy Systems

SEVENTH SEMESTER (July-December)														
Sl. No:	**Slot**	**Course Code**	**Course Type**	**Course Category**	**Course Title (Course Name)**	**Credit Structure**				**SS**	**Total Marks**		**Credits**	**Hrs/ Week**
						L	**T**	**P**	**R**		**CIA**	**ESE**		
1	A	PEEET74N/ PEEEM74N	PE	PE	PE-4 (Internship Students: Self Study/MOOC Approved by the College /Online Classes)	3	0	0	0	4.5	40	60	3	3
2	B	PEEET75N/ PEEEM75N	PE	PE	PE-5 (Internship Students: Self Study/MOOC Approved by the College /Online Classes)	3	0	0	0	4.5	40	60	3	3
3	O	OEXXT72N/ IEXXT72N/ OEXXM72N	OE/ ILE	OE/IE	OE/ILE-2 (Internship Students: Self Study/MOOC Approved by the College /Online Classes)	3	0	0	0	4.5	40	60	3	3
4	I*	UEHUT704/ UEHUM70N	HMC	UE	Elective (Internship Students: Self Study/MOOC Approved by the College /Online Classes)	2	0	0	0	3	50	50	2	2
5	S	PCEES705	PWS	PC	Seminar	0	0	3	0	1.5	50	0	2	3
6	P**	PCEEP706/ PCEEI706	PWS	PC	Option 1: Major Project Option 2: Internship (4-6 Months)	0	0	0	8	8	100	0	4	8
7	R/H		VAC		Remedial/Honours Course	3	0	0	0	4.5			3*	3*
Total										**26/ 31**			**17/20***	**22/25***

**No Grade Points will be awarded for the I slot courses*

Students can opt for the internship either in the* ***7th or 8th semester.

Option1: Work on a Project in the institute/department under the mentorship of faculty members.

*Option2: Full semester Internship in an Industry/organization (****7th or 8thsemester****)*

Note: Open Electives are such courses which will be offered by other departments.

PROGRAM ELECTIVE 4 – PEEET74N - SLOT A		
Sl. No:	**Course Code**	**Course Title (Course Name)**
1	PEEET741	Power System Operation and Control
2	PEEET742	Energy Management and Auditing
3	PEEET743	Special Electrical Machines
4	PEEET744	Discrete Time Control Systems
5	PEEET746	Digital Image Processing

PROGRAM ELECTIVE 5 – PEEET75N- SLOT B		
Sl. No.:	**Course Code**	**Course Title (Course Name)**
1	PEEET751	Power Quality
2	PEEET752	Nonlinear Control Systems
3	PEEET753	Deep Learning
4	PEEET754	Computer Vision

OPEN ELECTIVE 2 - OEEET72N - SLOT O		
Sl. No:	**Course Code**	**Course Title (Course Name)**
1	OEEET721	Design of Solar PV Systems
2	OEEET722	Hybrid and Electric Vehicles
3	OEEET723	Introduction to Energy Storage Systems

Slot I: HMC Elective	
1	Project Management: Planning, Execution, Evaluation and Control
2	Proficiency course in French. (MOOC) (B1level)
3	Proficiency Course in German (B1Level). (MOOC)
4	Proficiency Course in Spanish (B1Level) (MOOC)
5	Introduction to Japanese Language and Culture (N5level). (MOOC)

EIGHTH SEMESTER (January-June)														
Sl. No:	**Slot**	**Course Code**	**Course Type**	**Course Category**	**Course Title (Course Name)**	**Credit Structure**				**SS**	**Total Marks**		**Credits**	**Hrs/ Week**
						L	**T**	**P**	**R**		**CIA**	**ESE**		
1	A	PEEET86N /PEEEM86N	PE	PE	PE-6 (Internship Students: Self Study/ MOOC Approved by the College/ Online Classes)	3	0	0	0	4.5	40	60	3	3
2	O	OEXXT83N/ IEXXT83N/ OEXXM83N	OE/ILE	OE/IE	OE/ILE-3 (Internship Students: Self Study/ MOOC Approved by the College / Online Classes)	3	0	0	0	4.5	40	60	3	3
3	I*	UEHUT803/ UEHUM803	HMC	UC	Organizational Behavior and Business Communication (Internship Students: Self Study/MOOC Approved by the College / Online Classes)	2	0	0	0	3	50	50	1	2
4	P**	PCEEP806/ PCEEI806/ PCEEJ806	PWS	PC	Option1: Major Project Option2: Internship (4-6Months) Option3: Major Project Phase-II	0	0	0	8	8	100	0	4	8
Total										**20**			**11**	**16**

No Grade Points will be awarded for the I slot courses.

***Option1: For the students who have opted for an internship in S7*

*Option2: Full semester Internship in an Industry/organization (**7th or 8th semester**)*

Option3: For the students who have not opted for internship in S7/S8

PROGRAM ELECTIVE 6 – PEEET86N- SLOT A		
Sl. No:	**Course Code**	**Course Title (Course Name)**
1	PEEET861	Smart Grid Technologies
2	PEEET862	HVDC and FACTS
3	PEEET863	Mechatronic Systems
4	PEEET864	Electronic Communication

OPEN ELECTIVE 3 – OEEET83N - SLOT O		
Sl. No:	**Course Code**	**Course Title (Course Name)**
1	OEEET831	Introduction to Robotics
2	OEEET832	PLC and Automation
3	OEEET833	Mechatronic Systems and Control

HMC Courses			
Sl. No:	**Semester**	**Course Area**	**Credits**
1	**S1/S2**	Life Skills and Professional Communication	1
2	**S3/S4**	Economics for Engineers	2
3		Engineering Ethics and Sustainable Development	2
4	**S5**	Constitution Of India. (MOOC)	1
5	**S7**	Elective (Project Management/Foreign Languages)	2
6	**S8**	Organizational Behavior and Business Communication	1
Total Credits			**9**

BSC Courses			
Sl. No:	**Semester**	**Course Area**	**Credits**
1	**S1**	Group Specific Mathematics-1	3
2	**S1/S2**	Physics for Engineers	4
3		Chemistry for Engineers	4
4	**S2**	Group Specific Mathematics-2	3
5	**S3**	Group Specific Mathematics-3	3
6	**S4**	Group Specific Mathematics-4	3
Total Credits			**20**

ESC Courses (Group B)			
Sl. No:	**Semester**	**Course Area**	**Credits**
1	**S1**	Engineering Graphics and Computer Aided Drawing	3
2		Introduction to Electrical and Electronics Engineering	4
3		Algorithmic Thinking with Python	4
4		Basic Electrical and Electronics Engineering Workshop	1
5	**S2**	Foundations of Computing: From Hardware Essentials to Web Design / Engineering Mechanics (EEE, CP, RA and RU)	3
6		Programming in C	4
7		Engineering Entrepreneurship and IPR	3
8		IT Workshop	1
9	**S3**	Introduction to Artificial Intelligence and Data Science	4
10	**S6**	Design Thinking and Creativity	2
Total Credits			**29**

Programme Core Courses			
Sl. No:	**Semester**	**Course Area**	**Credits**
1	**S2**	Core 1	4
2	**S3**	Core 2	4
3		Core 3	4
4		Lab-1	2
5		Lab-2	2
6	**S4**	Core 4	4
7		Core 5	4
8		Lab-3	2
9		Lab-4	2
10	**S5**	Core 6	4
11		Core 7	4
12		Core 8	3
13		Lab-5	2
14		Lab-6	2
15	**S6**	Core 9	3
16		Core 10	3
17		Lab-7	2
18		Mini Project	2
19		Lab-8	1
Total Credits (Theory -10, Lab-8, Mini Project-1)			**54**

Programme Core-Project Based Learning (PBL)			
Sl. No:	**Semester**	**Course Area**	**Credits**
1	**S3**	Core PBL-1	4
2	**S4**	Core PBL-2	4
3	**S5**	Core PBL-3	4
4	**S6**	Core PBL-4	4
Total Credits			**16**

Programme Elective Courses (PE)			
Sl. No:	**Semester**	**Course Type**	**Credits**
1	**S4**	PE-1	3
2	**S5**	PE-2	3
3	**S6**	PE-3	3
4	**S7**	PE-4	3
5		PE-5	3
6	**S8**	PE-6	3
Total Credits			**18**

Open Elective Courses/Industry Elective(OE/IEL)			
Sl. No:	**Semester**	**Course Type**	**Credits**
1	**S6**	OE/ILE-1	3
2	**S7**	OE/ILE-2	3
3	**S8**	OE/ILE-3	3
Total Credits			**9**

Project/ Internship and Seminar			
Sl. No:	**Semester**	**Course Type**	**Credits**
1	**S7**	Seminar	2
2		Major Project/Internship	4
3	**S8**	Major Project/Internship/Research Project	4
Total Credits			**10**

<table>
<tr><th colspan="5">Activity Points</th></tr>
<tr><th>Sl. No.</th><th>Group</th><th>Courses</th><th>Credits</th><th>Minimum Credit Requirements</th></tr>
<tr><td>1</td><td rowspan="3">I</td><td>NSS, NCC, NSO (National Sports Organization)</td><td rowspan="3">1
(40 Points)</td><td rowspan="8">3 Credits
(One credit from each Group)</td></tr>
<tr><td>2</td><td>Arts/Sports/Games</td></tr>
<tr><td>3</td><td>Union/Club Activities</td></tr>
<tr><td>4</td><td rowspan="3">II</td><td>English Proficiency Certification (TOFEL, IELTS, BEC etc.)</td><td rowspan="3">1
(40 Points)</td></tr>
<tr><td>5</td><td>Aptitude Proficiency Certification (GRE, CAT, GMAT etc.)/ Valid Gate Score.</td></tr>
<tr><td>6</td><td>Short Term Internship (Minimum 2 weeks), Clinical Exposure/Training (Minimum 2 weeks), Conferences/Paper Presentation/ Workshop Activities/ Professional Body Activities, Participation in University level/State Level/ National Level Hackathons</td></tr>
<tr><td>7</td><td rowspan="2">III</td><td>Journal Publication, Patents, Start-Up, Innovation, Winners of National/ International Level Hackathons</td><td rowspan="2">1
(40 Points)</td></tr>
<tr><td>8</td><td>Skilling Certificates (Approved by the College)</td></tr>
</table>

- ***Students are required to acquire a minimum of 120 activity points, with at least 40 points per group, to fulfill the curriculum requirement of 3 activity credits.***
- ***For B. Tech Lateral Entry students, 30 points per group are required. A minimum of 90 activity points must be acquired to obtain the 3 activity credits mandated by the curriculum.***

Course classifications of the B. Tech Programmes and Overall Credit Structure			
Sl. No	**Category**	**Code**	**Credits**
1	Humanities and Social Sciences including Management Courses	HMC	9
2	Basic Science Courses	BSC	20
3	Engineering Science Courses	ESC	29
4	Programme (Professional) Core Courses	PCC	54
5	Programme (Professional) Core Courses-Project Based Learning	PBL	16
6	Programme Elective Courses	PEC	18
7	Open Elective Courses/Industry Linked Elective	OEC/ILE	9
8	Project Work/Internship and Seminar	PWS	10
9	Health and Wellness	PW	1
10	Skill Enhancement Courses (Digital 101)	SEC	1
11	Mandatory Student Activities	MSA	3
Total Credits			**170**

Chairperson, Electrical and Electronics Engineering, BoS

Prof. Laly James

Chairman, Academic Council & Principal

Dr. Benny Joseph