

B.Tech. 1st Year Course Structure : 2026-2027 – Odd Semester									
Semester 1 (Group – A)									
Sl. No.	Type of Course	Subject code	Subject name	L	T	P	S	Total Contact Hours	Credit Points
THEORY									
1	Basic Science Course	BSCPH101	Physics	3	1	0	0	4	4
2	Basic Science Course	BSCM103A	Mathematics - Calculus	3	1	0	0	4	4
3	Basic Science Course	BSCBE104	Biology for Engineers	2	0	0	0	2	2
4	Engineering Science Course	ESCEE101	Basic Electrical Engineering	3	1	0	0	4	4
5	Engineering Science Course	ESME102A	Engineering Mechanics - Principles	1	1	0	0	2	2
6	Engineering Science Course	ESCCS101	Programming for Problem Solving using C	2	1	0	0	3	3
7	General Studies Course	ESP101	Essential Studies for Professionals - I	1	0	0	0	1	1
PRACTICAL									
8	Basic Science Course	BSCPH191	Physics Laboratory	0	0	3	0	3	1.5
9	Basic Science Course	BSCBE194	Biology for Engineers Laboratory	0	0	2	0	2	1

10	Engineering Science Course	ESCEE191	Basic Electrical Engineering Laboratory	0	0	2	0	2	1
11	Engineering Science Course	ESCME192	Engineering Graphics & Design	1	0	4	0	5	3
12	Engineering Science Course	ESCCS191	Programming for Problem Solving Laboratory using C	0	0	4	0	4	2
SESSIONAL									
13	Mandatory Courses	IKS171	Indian Knowledge System for Engineers	0	0	0	2	2	2
Mandatory Industry and Value Added Courses (IVC)									
14	Mandatory Industry and Value Added Courses (IVC)	IVC181	Design Thinking & Innovation- Basic	0	0	0	1	1	0
15	Mandatory Industry and Value Added Courses (IVC)	IVC182	Economics, Finance and Entrepreneurship Skills - Basic	0	0	0	1	1	0
Total Credit Points of Semester				16	5	15	4	40	30.5
16	Mandatory Courses	MAR	Mandatory Additional Requirements	0	0	0	0	0	0
17	Mandatory Online Courses	MOOCs	Massive Open Online Courses	0	0	0	0	0	0
18	Mandatory Online Courses	IFC	Industry and Foreign Certification	0	0	0	0	0	0
19	Mandatory Courses	SAR	Skill Additional Requirements	0	0	0	0	0	0
Skill Addition Requirements (SAR) 1. Foreign Language, 2. Physical Education, 3. Soft Skill									

B.Tech. 1st Year Course Structure : 2026-2027 – Odd Semester

Semester 1 (Group – B)

Sl. No.	Type of Course	Subject code	Subject name	L	T	P	S	Total Contact Hours	Credit Points
THEORY									
1	Basic Science Course	BSCCH102	Chemistry	3	1	0	0	4	4
2	Basic Science Course	BSCM103B	Mathematics and Basic Statistics	3	1	0	0	4	4
3	Humanities and social sciences including Management	HSMC101	English	2	0	0	0	2	2
4	Engineering Science Course	ESCEC101	Basic Electronics Engineering	3	1	0	0	4	4
5	Engineering Science Course	ESME102B	Engineering Mechanics - Essentials	1	1	0	0	2	2
6	Engineering Science Course	ESCCS101	Programming for Problem Solving using C	2	1	0	0	3	3
7	General Studies Course	ESP101	Essential Studies for Professionals - I	1	0	0	0	1	1
PRACTICAL									
8	Basic Science Course	BSCCH192	Chemistry Laboratory	0	0	3	0	3	1.5
9	Humanities and social sciences including Management	HSMC191	Language laboratory	0	0	2	0	2	1
10	Engineering Science Course	ESCEC191	Basic Electronics Engineering Laboratory	0	0	2	0	2	1

11	Engineering Science Course	ESCME193	Workshop/ Manufacturing Practices	1	0	4	0	5	3
12	Engineering Science Course	ESCCS191	Programming for Problem Solving Laboratory using C	0	0	4	0	4	2
SESSIONAL									
13	Mandatory Courses	IKS171	Indian Knowledge System for Engineers	0	0	0	2	2	2
Mandatory Industry and Value Added Courses (IVC)									
14	Mandatory Industry and Value Added Courses (IVC)	IVC181	Design Thinking & Innovation- Basic	0	0	0	1	1	0
15	Mandatory Industry and Value Added Courses (IVC)	IVC182	Economics, Finance and Entrepreneurship Skills - Basic	0	0	0	1	1	0
Total Credit Points of Semester				16	5	15	4	40	30.5
16	Mandatory Courses	MAR	Mandatory Additional Requirements	0	0	0	0	0	0
17	Mandatory Online Courses	MOOCs	Massive Open Online Courses	0	0	0	0	0	0
18	Mandatory Online Courses	IFC	Industry and Foreign Certification	0	0	0	0	0	0
19	Mandatory Courses	SAR	Skill Additional Requirements	0	0	0	0	0	0
Skill Addition Requirements (SAR) 1. Foreign Language, 2. Physical Education, 3. Soft Skill									

B.Tech. 1st Year Course Structure : 2026-2027 – Even Semester

Semester 2 (Group – A)

Sl. No.	Type of Course	Subject code	Subject name	L	T	P	S	Total Contact Hours	Credit Points
THEORY									
1	Basic Science Course	BSCCH202	Chemistry	3	1	0	0	4	4
2	Basic Science Course	BSCM203B	Mathematics and Basic Statistics	3	1	0	0	4	4
3	Humanities and social sciences including Management	HSMC201	English	2	0	0	0	2	2
4	Engineering Science Course	ESCEC201	Basic Electronics Engineering	3	1	0	0	4	4
5	Engineering Science Course	ESME202B	Engineering Mechanics - Essentials	1	1	0	0	2	2
6	Engineering Science Course	ESCCS202	Introduction to AI and Data Science using Python	2	1	0	0	3	3
7	General Studies Course	ESP201	Essential Studies for Professionals - II	1	0	0	0	1	1
PRACTICAL									
8	Basic Science Course	BSCCH292	Chemistry Laboratory	0	0	3	0	3	1.5
9	Humanities and social sciences including Management	HSMC291	Language laboratory	0	0	2	0	2	1
10	Engineering Science Course	ESCEC291	Basic Electronics Engineering Laboratory	0	0	2	0	2	1
11	Engineering Science Course	ESCME293	Workshop/ Manufacturing Practices	1	0	4	0	5	3

12	Engineering Science Course	ESCCS292	Introduction to AI and Data Science Laboratory using Python	0	0	4	0	4	2
SESSIONAL									
13	Humanities and social sciences	UHV272	Universal Human Values- II	0	0	0	2	2	3
Mandatory Industry and Value Added Courses (IVC)									
14	Mandatory Industry and Value Added Courses (IVC)	IVC281	Design Thinking & Innovation- Imtermediate	0	0	0	1	1	0
15	Mandatory Industry and Value Added Courses (IVC)	IVC282	Economics, Finance and Entrepreneurship Skills – Intermediate	0	0	0	1	1	0
Total Credit Points of Semester				16	5	15	4	40	31.5
16	Mandatory Courses	MAR	Mandatory Additional Requirements	0	0	0	0	0	0
17	Mandatory Online Courses	MOOCs	Massive Open Online Courses	0	0	0	0	0	0
18	Mandatory Online Courses	IFC	Industry and Foreign Certification	0	0	0	0	0	0
19	Mandatory Courses	SAR	Skill Additional Requirements	0	0	0	0	0	0
Skill Addition Requirements (SAR) 1. Foreign Language, 2. Physical Education, 3. Soft Skill									

B.Tech. 1st Year Course Structure : 2026-2027 – Even Semester

Semester 2 (Group – B)

Sl. No.	Type of Course	Subject code	Subject name	L	T	P	S	Total Contact Hours	Credit Points
THEORY									
1	Basic Science Course	BSCPH201	Physics	3	1	0	0	4	4
2	Basic Science Course	BSCM203A	Mathematics - Calculus	3	1	0	0	4	4
3	Basic Science Course	BSCBE204	Biology for Engineers	2	0	0	0	2	2
4	Engineering Science Course	ESCEE201	Basic Electrical Engineering	3	1	0	0	4	4
5	Engineering Science Course	ESME202A	Engineering Mechanics - Principles	1	1	0	0	2	2
6	Engineering Science Course	ESCCS202	Introduction to AI and Data Science using Python	2	1	0	0	3	3
7	General Studies Course	ESP201	Essential Studies for Professionals - II	1	0	0	0	1	1
PRACTICAL									
8	Basic Science Course	BSCPH291	Physics Laboratory	0	0	3	0	3	1.5
9	Basic Science Course	BSCBE294	Biology for Engineers Laboratory	0	0	2	0	2	1
10	Engineering Science Course	ESCEE291	Basic Electrical Engineering Laboratory	0	0	2	0	2	1
11	Engineering Science Course	ESCME292	Engineering Graphics & Design	1	0	4	0	5	3

12	Engineering Science Course	ESCCS292	Introduction to AI and Data Science Laboratory using Python	0	0	4	0	4	2
SESSIONAL									
13	Humanities and social sciences	UHV272	Universal Human Values- II	0	0	0	2	2	3
Mandatory Industry and Value Added Courses (IVC)									
14	Mandatory Industry and Value Added Courses (IVC)	IVC281	Design Thinking & Innovation- Intermediate	0	0	0	1	1	0
15	Mandatory Industry and Value Added Courses (IVC)	IVC282	Economics, Finance and Entrepreneurship Skills - Intermediate	0	0	0	1	1	0
Total Credit Points of Semester				16	5	15	4	40	31.5
16	Mandatory Courses	MAR	Mandatory Additional Requirements	0	0	0	0	0	0
17	Mandatory Online Courses	MOOCs	Massive Open Online Courses	0	0	0	0	0	0
18	Mandatory Online Courses	IFC	Industry and Foreign Certification	0	0	0	0	0	0
19	Mandatory Courses	SAR	Skill Additional Requirements	0	0	0	0	0	0
Skill Addition Requirements (SAR) 1. Foreign Language, 2. Physical Education, 3. Soft Skill									

Syllabus Structure

Sl. No	Type of Course	Course Code	Course Name	L	T	P	S	Total Contact Hours	Credit Points
1	Basic Science Courses	BSM301	Mathematics-III	2	1	0	0	3	3
2	Professional Core Courses	PCCEE301	Electrical Circuit Analysis	2	1	0	0	3	3
3	Professional Core Courses	PCCEE302	Analog Electronics	3	1	0	0	4	3
4	Professional Core Courses	PCCEE303	Electromagnetic Field theory	3	1	0	0	4	4
5	Professional Core Courses	PCCEE304	Measurement and Instrumentation	3	1	0	0	4	3
6	Humanities and social sciences including Management	MC301	Indian Constitution	0	0	0	2	2	0
7	Humanities and social sciences including Management	ESP301	Essential Studies for Professionals III	2	0	0	0	2	0.5
8	Professional Core Courses	PCCEE391	Electrical Circuit Analysis Laboratory	0	0	3	0	3	1
9	Professional Core Courses	PCCEE392	Analog Electronics Lab	0	0	3	0	3	1
10	Professional Core Courses	PCCEE393	Data Structure and Algorithm Lab	0	1	3	0	4	3
11	Professional Core Courses	PCCEE394	Measurement and Instrumentation Lab	0	0	3	0	3	1
12	Humanities and social sciences including Management	SDP381	Skill Development for Professionals III				2	2	0.5
13	Project. Seminar and Industrial Training	PWEE381	Mini Project I				1	1	1

14	Massive Open Online Courses (MOOCs)	MOOCs	Massive Open Online Courses (MOOCs)						
15	Industry and Foreign Certification (IFC)	IFC	Industry and Foreign Certification (IFC)						
16	Mandatory Additional Requirements (MAR)	MAR381	Mandatory Additional Requirements (MAR)						
Total Credit Points of Semester				15	6	12	5	38	24

Syllabus Structure:

[illegible]

Syllabus Structure:

Sl No	Type of Course	Course Code	Course Name	L	T	P	S	Total Contact Hours	Credit Points
1	Professional Core Courses	PCCEE501	Electrical Machines-II	3	1	0	0	4	3
2	Professional Core Courses	PCCEE502	Power system-I	3	1	0	0	4	3
3	Professional Core Courses	PCCEE503	Control System	3	1	0	0	4	3
4	Humanities and social sciences including Management	HSMCEE571	Engineering Economics	3	0	0	0	3	3
5	Professional Elective Courses	PECEE501	A. Industrial Automation and SCADA B. Electromagnetic Waves	3	0	0	0	3	3
6	Open Elective Courses	OECEE501	A. Database Management System B. Analog and Digital Communication	2	0	0	0	2	2
7	Humanities and social sciences including Management	ESPEE501	Essential Studies for Professionals V	2	0	0	0	2	0.5
8	Professional Core Courses	PCCEE591	Electrical Machines Laboratory - II	0	0	3	0	2	1
9	Professional Core Courses	PCCEE592	Power System Laboratory - I	0	0	3	0	2	1
10	Professional Core Courses	PCCEE593	Control System Lab	0	0	3	0	2	1
11	Professional Elective Courses	PECEE501	A. Industrial Automation and SCADA lab B. Electromagnetic Waves	0	0	3	0	2	1
12	Humanities and social sciences including Management	SDP581	Skill Development for Professionals V			0	2	2	0.5
13	Project, Seminar and Industrial Training	PWEE581	Mini Project III			0	1	1	1
14	Massive Open Online Courses (MOOCs)	MOOCs	Massive Open Online Courses (MOOCs)						
15	Industry and Foreign Certification (IFC)	IFC	Industry and Foreign Certification (IFC)						
16	Mandatory Additional Requirements (MAR)	MAR581	Mandatory Additional Requirements (MAR)						
Total Credit Points of Semester				19	3	12	3	33	23

Semester VI [Third year]
Branch/Course: Electrical Engineering

Sl No	Type of Course	Course Code	Course Name	L	T	P	Total Contact Hours	Credit Points
1	Professional Core Courses	PCC-EE 601	Power System-II (Operation and Control)	3	1	0	4	3
2	Professional Core Courses	PCC-EE 602	Microprocessor & Microcontroller	3	0	0	3	3
3	Professional Elective Courses	PEC-EE 601	A. Wind and Solar Power Energy System B. Electric and Hybrid Vehicles	3	0	0	3	3
4	Professional Elective Courses	PEC-EE 602	A. Measurement and Instrumentation B. Semiconductor Design and Simulation	2	0	0	2	2
5	Open Elective Courses	OEC-EE 601	A. IoT B. AI & ML C. Industrial Automation- II	2	0	0	2	2
6	Humanities and social sciences including Management	HSMCEE 671	Principles of Management	2	0	0	2	2
7	Humanities and social sciences including Management	ESP(EE) 601	ESSENTIAL STUDIES FOR PROFESSIONAL- VI	2	0	0	2	0.5
8	Professional Core Courses	PCC-EE 691	Power System Laboratory - II	0	0	3	3	1
9	Professional Core Courses	PCC-EE 692	Microprocessor & Microcontroller Laboratory	0	0	3	3	1
10	Professional Elective Courses	PEC-EE 691	A. Wind and Solar Power Energy System Laboratory B. Electric and Hybrid Vehicles	0	0	3	3	1
11	Professional Core Courses	PEC-EE 692	A. Measurement and Instrumentation Laboratory	0	0	3	3	1

			B. Semiconductor Design and Simulation Laboratory					
12	Humanities and social sciences including Management	SDP 681	Skill Development for Professionals VI				2	0.5
13	Project. Seminar and Industrial Training	PWEE681	Mini Project IV				1	1
14	Massive Open Online Courses (MOOCs)	MOOCs	Massive Open Online Courses (MOOCs)					
15	Industry and Foreign Certification (IFC)	IFC	Industry and Foreign Certification (IFC)					
16	Mandatory Additional Requirements (MAR)	MAR681	Mandatory Additional Requirements (MAR)					
Total Credit Points of Semester				17	0	8	33	21

Syllabus structure

Sl. No	Type of Course	Course Code	Course Name	L	T	P	S	Total Contact Hours	Credit Points
Theory									
1	Professional Elective Courses	PEC-EE 701	A. Digital Signal Processing B. Digital Control System C. Electric Drives	3	0	0		3	3
2	Open Elective Courses	OEC-EE 701	A. Embedded System B. VLSI Circuits	3	0	0		3	2
3	Open Elective Courses	OEC-EE 702	A. Big Data Analysis B. Computer Network	2	0	0		2	2
4	Humanities and Social Sciences including Management	HSMC-701	Human Resource Development & Organisational Behaviour	3	0	0		2	2
5	Humanities and Social Sciences including Management	ESPEE 701	Essential Studies for Professionals VII	2	0	0		2	0.5
SESSIONAL									
6	Project. Seminar and Industrial Training	PI-EE 781	Industrial Training/Internship				12w	-	4
7	Humanities and Social Sciences including Management	SDP 781	Skill Development for Professionals VII				2	2	0.5
8	Project. Seminar and Industrial Training	PWEE781	Project (Phase I)				6	6	3
Value Added Courses									
9	Massive Open Online Courses (MOOCs)	MOOCs	Massive Open Online Courses (MOOCs)						
10	Industry and Foreign Certification (IFC)	IFC	Industry and Foreign Certification (IFC)						
11	Mandatory Additional Requirements (MAR)	MAR781	Mandatory Additional Requirements (MAR)						
Total Credit Points of Semester				13	0	0	8	20	17

Semester VIII [Fourth year]
Branch/Course: Electrical Engineering
Course structure

Sl No	Type of Course	Course Code	Course Name	L	T	P	S	Total Contact Hours	Credit Points
Theory									
1	Professional Elective Courses	PEC-EE801	A. Control System Design B. Electrical Energy Conservation and Audit C. Electrical Machine Design	3	0	0	0	3	3
2	Professional Elective Courses	PEC-EE802	A. H.V.D.C. Transmission System B. Power quality & FACTS C. Power System Protection	3	0	0	0	3	3
3	Open Elective Courses	OEC-EE801	A. Power Plant Engineering B. Automobile Engineering C. Sensors & Transducers	3	0	0	0	3	3
4	Humanities and social sciences including Management	ESPEE 801	Essential Studies for Professionals VIII	2	0	0	0	2	0.5
SESSIONAL									
5	Project. Seminar and Industrial Training	PI 881	Industrial Training/Internship				12w	-	4
6	Humanities and social sciences including Management	SDP 881	Skill Development for Professionals VII				2	2	0.5
7	Project. Seminar and Industrial Training	PWEE881	Project (Phase II)				6	6	3
Value Added Courses									
8	Massive Open Online Courses (MOOCs)	MOOCs	Massive Open Online Courses (MOOCs)						
9	Industry and Foreign Certification (IFC)	IFC	Industry and Foreign Certification (IFC)						
10	Mandatory Additional Requirements (MAR)	MAR781	Mandatory Additional Requirements (MAR)						
Total Credit Points of Semester									17

Phyital Learning Certificate Course Details for EE Department

Specialized Certificate for 2nd Year and 3rd Year	Any one certificate during 3rd and 4th Sem.	Data Structures and Algorithms Specialization	https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/specializations/data-structures-algorithms?source=search
		Introduction to Electricity and Magnetism Specialization	https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/specializations/introduction-to-electricity-magnetism?source=search
		Power Electronics Specialization	https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/specializations/power-electronics?source=search
		Renewable Energy Specialization	https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/specializations/renewable-energy?source=search
	Any one certificate during 5th and 6th Sem.	Battery Technologies Specialization	https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/specializations/battery-technologies?source=search
		Design of Utility Systems for Industrial Plants Specialization	https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/specializations/design-of-utility-systems-for-industrial-plants?source=search
Power System: Generation, Transmission and Protection Specialization		https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/specializations/power-system-generation-transmission-and-protection?source=search	
Electric Vehicle Systems and Technologies Specialization		https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/specializations/electric-vehicle-systems-and-technologies?source=search	
		Renewable Energy & Power Evacuation Specialization	https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/specializations/renewable-energy-power-evacuation?source=search
		Industrial Power Systems Analysis and Stability Specialization	https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/specializations/industrial-power-systems-analysis-and-stability?source=search
1st Year	ESCEE201: Basic Electrical Engineering	1. Physics 102 - Electric Potential and DC Circuits 2. Electric Power Systems	1. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/physics-102-electric-potential-and-dc-circuits?fromClip=sfc_page_course_link~hyOkY 2. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/electric-power-systems?source=search#modules
3rd Semester	PCCEE301 : Electrical Circuit Analysis	1. Electrical Design Engineer - Circuit Analysis 2. Linear Circuits:AC Analysis 3. Fundamentals of Credit Analysis	1. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/electrical-design-engineer--circuit-analysis?source=search 2. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/linear-circuits-ac-analysis?source=search 3. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/fundamentals-of-credit-analysis?source=search
	PCCEE302 :Analog Electronics	1. Basic Electronics 2. Introduction to Electronics 3. Analog-to-Digital and Digital-to-Analog Conversion	1. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/basic-electronics-odc?source=search 2. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/electronics?source=search 3. https://www.coursera.org/videos/dsp3/dQzrU?query=Analog+Electronics&source=search
4th Semester	PCCEE401:Electric Machine-I	1. Motors and Motor Control Circuits 2. Batteries and Electric Vehicles 3. Fundamentals of Robotics & Industrial Automation	1. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/motors-circuits-design?source=search#modules 2. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/batteries-and-electric-vehicles?fromClip=sfc_page_course_link~cP6BM 3. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/fundamentals-of-robotics--industrial-automation?fromClip=sfc_page_course_link~i0UiY
	PCCEE403:Power Electronics	1. Basic Electronics 2. Power Electronics Specialization 3. Introduction to Power Electronics 4. Converter Circuits 5. Converter Control	1. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/basic-electronics-odc?source=search 2. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/specializations/power-electronics?source=search 3. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/power-electronics?source=search 4. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/converter-circuits?specialization=power-electronics 5. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/converter-control?specialization=power-electronics
5th Semester	PCCEE502 :Power system-I	1. Power System: Generation, Transmission and Protection Specialization 2. Design of Transmission Line: Modelling and Performance 3. Power System Stability 4. Electrical Power Distribution 5. Load Flow Analysis 6. Basics of Electrical Protection System	1. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/specializations/power-system-generation-transmission-and-protection?collectionId=skill~electric-power-systems&source=search 2. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/design-of-transmission-line-modelling-and-performance?collectionId=skill~electric-power-systems&source=search 3. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/power-system-stability?collectionId=skill~electric-power-systems&source=search 4. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/electrical-power-distribution?collectionId=skill~electric-power-systems&source=search 5. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/load-flow-analysis?collectionId=skill~electric-power-systems&source=search 6. coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/basics-of-electrical-protection-system?source=search&collectionId=skill~electric-power-systems
	PCCEE503 : Control System	1. Control System Configuration in Thermal Power Plants 2. Overview of Power Plant Control Systems 3. Control System Configuration in Power Plants	1. https://www.coursera.org/videos/electrical-power-generation-an-industrial-outlook/Udd47?query=Control+System&source=search 2. https://www.coursera.org/videos/electrical-power-generation-an-industrial-outlook/uXUb0?query=Control+System&source=search 3. https://www.coursera.org/videos/electrical-power-generation-an-industrial-outlook/KA6Cp?query=Control+System&source=search
6th Semester	PECEE601 :Wind and Solar Power Energy System	1. Solar Energy Basics	1. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/solar-energy-basics?collectionId=skill~electric-power-systems&source=search
		2. Renewable Energy Specialization 3. Renewable Power and Electricity Systems 4. Solar Power Generation	2. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/specializations/renewable-energy?collectionId=skill~electric-power-systems&source=search 3. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/renewable-power-electricity-systems?collectionId=skill~electric-power-systems&source=search 4. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/solar-power-generation?collectionId=skill~electric-power-systems&source=search

	OECEE601 :AI & ML	1. Artificial Intelligence and Machine Learning (AI/ML) 2. Supervised Machine Learning: Regression and Classification 3. Advanced Learning Algorithms 4. Unsupervised Learning, Recommenders, Reinforcement Learning	1. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/skills/artificial-intelligence-and-machine-learning-ai-ml?query=AI&source=search 2. https://www.coursera.org/learn/machine-learning?specialization=machine-learning-introduction 3. https://www.coursera.org/learn/advanced-learning-algorithms?specialization=machine-learning-introduction 4. https://www.coursera.org/learn/unsupervised-learning-recommenders-reinforcement-learning?specialization=machine-learning-introduction
7th Semester	PEC-EE 701 :Electric Drives	1. Electric Vehicle Systems and Technologies Specialization 2. Powering the Drive: Unveiling EV Electronics 3. Power Electronic Systems in Electric Vehicles 4. Electric Motors and Drive Systems in EVs	1. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/specializations/electric-vehicle-systems-and-technologies?source=search 2. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/powering-the-drive-unveiling-ev-electronics?source=search 3. https://www.coursera.org/videos/electric-vehicle-operation-and-diagnosis/3OKh9?query=Electric+Drives+&source=search 4. https://www.coursera.org/videos/electric-vehicle-operation-and-diagnosis/clztu?query=Electric+Drives+&source=search
	OEC-EE 701:Embedded system	1. Introduction to the Internet of Things and Embedded Systems 2. Introduction to Embedded Systems Software and Development Environments 3. Embedded Systems using C	1. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/iot?source=search 2. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/introduction-embedded-systems?source=search 3. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/embedded-systems-using-c?source=search
	OEC-EE 702 :Computer Network	1. The Bits and Bytes of Computer Networking 2. Computer Networks and Network Security 3. Fundamentals of Computer Network Security Specialization	2. 1. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/computer-networking?source=search 2. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/network-security-database-vulnerabilities?source=search 3. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/specializations/computer-network-security?source=search
	HSMC-701:Human Resource Development & Organisational Behaviour	1. Understand Human Resource Management Fundamentals 2. Human Resources Management and GenAI Specialization 3. Human Resource Management: HR for People Managers Specialization	1. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/understand-human-resource-management-fundamentals?source=search 2. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/specializations/human-resources-management-and-genai?source=search 3. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/specializations/human-resource-management?source=search
			E39:F41E41E41:F42
8th Semester	PECEE801:Electrical Machine Design	1. Fundamentals of Robotics & Industrial Automation 2. Renewable Energy Futures 3. Powering the Future with Electrification 4. Bridging the Gap: EV Grid Integration & V2G Systems	1. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/fundamentals-of-robotics--industrial-automation 2. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/renewable-energy-futures?collectionId=skill~electric-power-systems&source=search 3. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/electrification?collectionId=skill~electric-power-systems&source=search 4. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/bridging-the-gap-ev-grid-integration--v2g-systems?collectionId=skill~electric-power-systems&source=search
	PECEE802:Power quality & FACTS	1. Industrial Power Systems Analysis and Stability Specialization 2. Solar Power Sensors 3. Power System Stability	1. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/specializations/industrial-power-systems-analysis-and-stability?source=search#outcomes 2. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/solar-power-sensors?fromClip=sfc_page_course_link~w3293#modules 3. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/power-system-stability?source=search#modules
	OECEE801:Power Plant Engineering	1. Power System: Generation, Transmission and Protection Specialization 2. Electrical Power Generation - An Industrial Outlook 3. Basics of Electrical Protection System 4. Advanced Study of Protection Schemes and Switchgear 5. Design of Transmission Line: Modelling and Performance 6. Renewable Power and Electricity Systems 7. Electrical Power Generation - An Industrial Outlook 8. Plant Design & Economics	1. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/specializations/power-system-generation-transmission-and-protection?source=search 2. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/electrical-power-generation-an-industrial-outlook?specialization=power-system-generation-transmission-and-protection 3. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/basics-of-electrical-protection-system?specialization=power-system-generation-transmission-and-protection 4. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/advanced-study-of-protection-schemes-and-switchgear?specialization=power-system-generation-transmission-and-protection 5. https://www.coursera.org/programs/iem-faculty-learning-program-rtyr7/learn/design-of-transmission-line-modelling-and-performance?specialization=power-system-generation-transmission-and-protection 6. https://www.coursera.org/learn/renewable-power-electricity 7. https://www.coursera.org/learn/electrical-power-generation-an-industrial-outlook 8. https://www.coursera.org/learn/plant-design-economics
	ESPEE801 :Essential Studies for Professionals VIII	1. Banking & Finance in India 2. Contemporary Issues in World Politics 3. Basics Economics 4. Microeconomics: Foundations and Insights	1. https://www.coursera.org/learn/banking-and-finance-in-india 2. https://www.coursera.org/learn/contemporary-issues-in-world-politics 3. https://www.coursera.org/programs/uemj-passout-batch-2028-54ok2/learn/basics-economics?source=search 4. https://www.coursera.org/programs/uemj-passout-batch-2028-54ok2/learn/microeconomics-foundations-insights-jgu?source=search