

# PAAVAI ENGINEERING COLLEGE

(Autonomous)

**1.3.1 Institution integrates cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability, and Human Values into the curriculum**

**Academic Year: 2021-2022**

S.No	Regulations	No. of Courses		
		Gender	Environment and Sustainability	Human Values and Professional ethics
1	2016,2019	1	56	60

**1.3.1. Institution integrates cross cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum 2019**

S.NO	Name of the Programme & Department	No. of Courses		
		Gender	Environment and Sustainability	Human Values and Professional ethics
1	Common Courses		1	1
2	B.E Aeronautical Engineering			9
3	B.Tech Agricultural Engineering		3	2
4	B.E Biomedical Engineering		3	3
5	B.Tech Chemical Engineering		5	3
6	B.E Civil Engineering		20	7
7	B.E Computer Science and Engineering			2
8	B.E Cyber Security			
9	B.E Electronics and Communication Engineering		2	2
10	B.E Electrical & Electronics Engineering		8	9
11	B.Tech Food Technology		2	4
12	B.Tech Information Technology		1	2
13	B.E Mechanical Engineering		1	2
14	B.E Mechatronics		1	
15	B.E Medical Electronics		1	2
16	B.Tech Pharmaceutical Technology			4
17	Master of Business Administration	1	2	3
18	Master of Computer Applications		2	1
19	Science and Humanities			
20	M.E Communication Systems			1
21	M.E Engineering Design			
22	M.E Power Systems Engineering		4	3
<b>Total</b>		<b>1</b>	<b>56</b>	<b>60</b>

**PAAVAI ENGINEERING COLLEGE**

(Autonomous)

**COURSES – CROSS CUTTING ISSUES**

**Regulations 2019 (for the candidates admitted from the academic year 2020-2021 onwards)**

<b>Department</b>	<b>Course name</b>	<b>Course code</b>	<b>Description</b>	<b>Gender, Environment and Sustainability, Human Values and Professional Ethics</b>
<b>Common Courses</b>	Environmental Science and Engineering	MC20201	Explain the concepts of different types of water sources, water quality parameters and factors governing selection of a good water source and conventional water treatment. This course also explains the social issues with regard to the environment.	Environment and Sustainability
	Value Education	MC20301	This includes topics such as reading/writing/listening comprehension, note taking, summarizing, report writing, along with elements of grammar and vocabulary. It is used to express that knowledge in a clear, concise, and coherent manner.	Human Values and Professional Ethics
<b>Chemical Engineering</b>	Process Technology and Economics	CM20601	Explain the role of chemical engineers in process industries, flow chart for manufacture of different chemicals, petroleum refining, chemical industries utilities and its effective use and importance of planning and organization.	Human Values and Professional Ethics
	Chemical Process Plant Safety	CM20604	Explain the chemical process safety, plant layout, safety codes, identification and protection of the effect of occupational health hazards, risk management, safety audits, checklist, analysis of fault tree, and HAZOP and case study.	Environment and Sustainability
<b>Civil Engineering</b>	Water Supply Engineering	CE20404	The course includes the analysis of PH value, turbidity, alkalinity, optimum coagulation dosage and chloride contents etc.,	Environment and Sustainability
	Highway Engineering	CE20402	It involves the planning, design, construction, operation, and maintenance of roads, highways, streets, bridges, and tunnels to ensure safe and effective transportation of people and goods.	Human Values and Professional Ethics

	Environmental Science and Engineering	MC20201	It combines the biological, chemical and physical sciences with the field of engineering	Environment and Sustainability
	Waste Water Engineering	CE20504	Wastewater treatment is a process which removes and eliminates contaminants from wastewater and converts this into an effluent that can be returned to the water cycle.	Environment and Sustainability
	Railways, Airports and Harbour Engineering	CE20603	It is a multi-faceted engineering discipline dealing with the design, construction and operation of all types of rail transport systems. It encompasses a wide range of engineering disciplines, including civil engineering	Human Values and Professional Ethics
	Pavement Engineering	CE20153	This course describes design of rigid and flexible pavements as per IRC, testing of materials used for pavement construction, bearing value of soil, etc, to enrich Human safety while Driving vehicles on pavement.	Human Values and Professional Ethics
	Green Building	CE20153	It refers to saving resources to the maximum extent, including energy saving, land saving, water saving, material saving, etc., during the whole life cycle of the building, protecting the environment and reducing pollution, providing people with healthy, comfortable and efficient use of space, and being in harmony with nature Buildings that live in harmony.	Environment and Sustainability
	Environmental and Social Impact Assessment	CE20254	Help the students appreciate the essential complementarities between values and skills to ensure sustained happiness which are the core appreciations of all human beings. It creates an awareness on Engineering Ethics and Human Values	Environment and Sustainability
	Structural Dynamics and Earthquake Engineering	CE20351	This course outlines the dynamic behaviour of structures, design of resistance structures for earthquake as per code, shear walls, etc	Human Values and Professional Ethics
	Municipal Solid Waste Management	CE20353	solid waste management mainly refers to the complete process of collecting, treating and disposing of solid wastes. In the waste management process, the wastes are collected from different sources and are disposed of. This process includes collection, transportation, treatment, analysis and disposal of waste. It needs to be monitored so that strict regulations and guidelines are followed.	Environment and Sustainability

	Traffic Engineering and Management	CE20354	It is a branch of civil engineering that uses engineering techniques to achieve the safe and efficient movement of people and goods on roadways. It focuses mainly on research for safe and efficient traffic flow, such as road geometry, sidewalks and crosswalks, cycling infrastructure, traffic signs, road surface markings and traffic lights.	Human Values and Professional Ethics
	Building Services	CE20901	Building services is a <u>professional engineering</u> discipline that strives to achieve a safe and comfortable indoor environment whilst minimizing the environmental impact of a building.	Human Values and Professional Ethics

### Regulations 2019

Department	Course name	Course code	Description	Gender, Environment and Sustainability, Human Values and Professional Ethics
<b>Aeronautical</b>	Entrepreneurship Development	BA19G04	Help the students to develop their skill and motivates them to become a successful entrepreneur	Human Values and Professional Ethics
	Principles of Unmanned Aerial Vehicle	AE19904	A UAV, which stands for Unmanned Aerial Vehicle, is an aircraft that operates without a human pilot on board. UAVs are also commonly referred to as drones. These vehicles come in various sizes and designs, ranging from small, handheld quadcopters to large, long-endurance fixed-wing aircraft. UAVs are used for a wide range of applications in both civilian and military contexts.	Human Values and Professional Ethics
<b>Agricultural Engineering</b>	Industrial safety Management	AI19152	This course includes the safety related to Industry safety considering the human factors and errors and also focus on how to save human life during emergency situations.	Human Values and Professional Ethics
<b>Biomedical Engineering</b>	Entrepreneurship Development	BA19151	Help the students to develop their skill and motivates them to become a successful entrepreneur	Human Values and Professional Ethics

	Environmental Science and Engineering	MC19401	learn about pollution of natural resources by socio economic activities of human, acquire scientific knowledge on environment and its impact on eco systems, learn about pollution of natural resources by socio economic activities of human, understand the natural resources and its exploitation, know the role of human population, information technology on environment protection	Environment and Sustainability
	Biomedical Waste Management	BM19902	Helps the students to know about the sources of different types of medical waste and to classify hazardous medical waste and healthcare waste, learn to recycle the waste and how to dispose hazardous waste.	Environment and Sustainability
<b>Electrical &amp; Electronics Engineering</b>	Environmental Science and Engineering	MC19401	multidisciplinary field of engineering science that combines the biological, chemical and physical sciences with the field of engineering.	Environment and Sustainability
	Wind and Solar Energy Systems	EE19601	Wind and Solar energy resources impact in electrical power generation, Generation method of electrical power. Waste management of the solar panels.	Environment and Sustainability
	Energy Auditing	EE19452	Energy Audit is a vital link in the entire management chain. The energy manager, while proposing various courses of action and evaluating their consequences, requires a detailed information base to work from energy audit attempts to balance the total energy inputs with its use and serves to identify all the energy streams in the system and quantifies energy usages according to its discrete function.	Human Values and Professional Ethics
	Electrical Safety	EE19903	a system of organizational measures and technical means to prevent harmful and dangerous effects on workers from electric current, arcing, electromagnetic fields and static electricity.	Human Values and Professional Ethics
	SMPS and UPS	EE19904	A good and proper capacity power supply is required for providing sufficient power to all your computer components so that they function properly even at full load.	Environment and Sustainability/ Local Needs

	Total Quality Management	EE19654	TQM can have an important and beneficial effect on employee and organizational development.	Human Values and Professional Ethics
<b>Food Technology</b>	Food Process Economics and Industries	FT19154	Makes the students to understand the concepts of production and operations management in industries and expose to analytical methods.	Human Values and Professional Ethics
	IPR in Food Industries	FT19601	Express the concept of IPR, Patents, Trademarks relevant to food organization.	Human Values and Professional Ethics
	Research Methodology	FT19264	Identifying the Research problems and collect the suitable data for Research. Write Research proposals and reports and apply their research work for patent through IPR.	Human Values and Professional Ethics
	Environmental issues in Food Industries	FT19904	Explain the concepts of different types of food sources, food quality parameters and factors governing selection of a good food source and conventional food treatment. This course also explains the social issues with regard to the environment.	Environment and Sustainability
<b>Information Technology</b>	Green Computing	IT19902	learn about pollution of natural resources by socio economic activities of human, acquire scientific knowledge on environment and its impact on eco systems, learn about pollution of natural resources by socio economic activities of human, understand the natural resources and its exploitation, know the role of human population, information technology on environment protection	Environment and Sustainability
	Entrepreneurship Development	BA19151	Help the students to develop their skill and motivates them to become a successful entrepreneur	Human Values and Professional Ethics
<b>Medical Electronics</b>	Entrepreneurship Development	BA19151	Help the students to develop their skill and motivates them to become a successful entrepreneur	Human Values and Professional Ethics

<b>Pharmaceutical Technology</b>	IPR for Pharmaceutical Industry	PT19501	This includes topics such as reading/writing/listening comprehension, note taking, summarizing, report writing, along with elements of grammar and vocabulary. It is used to express that knowledge in a clear, concise, and coherent manner for pharma industry	Human Values and Professional ethics
<b>M.B.A – Master Of Business Administration</b>	Business Ethics	BA19101	learn the role of ethics in Corporate Governance.	Human Values and Professional Ethics
	Organizational Behavior	BA19103	Understand the outcomes of individual behaviour and its impact on work Describe the dynamics in group behaviour and means of developing effective team	Human Values and Professional Ethics
	Social Development Laboratory	BA19107	Know social issues and generate feasible solutions.	Environment and Sustainability
	Indian Ethos in Modern Management	BA19G01	Understand the ethical dimensions in managing employees at work place.	Human Values and Professional Ethics
	Entrepreneurship Development	BA19G04	This course speaks about the Entrepreneurship and sustainability	Environment and Sustainability
	Gender and Society	21BAVC301	To enable the students to introspect on the Gendered experiences across the spectrum of daily life and understand power relationship through gender lens	Gender
<b>M.E (Communication Systems)</b>	Research Methodology and IPR	PEN19101	Identifying the Research problems and collect the suitable data for Research. Write research proposals and Reports and apply their research work for patent through IPR	Human Values and Professional Ethics
<b>M.E Power Systems Engineering</b>	Power Electronics for Renewable Energy Systems	PPS19151	The PE plays crucial role of conversion and control electrical power. Therefore, PE based power converters are also widely used in renewable energy systems.	Environment and Sustainability
	Wind and Solar Systems	PPS19154	Wind and Solar energy resources impact in electrical power generation, Generation method of electrical power. Waste management of the solar panels.	Environment and Sustainability
	Electric and Hybrid Vehicles	PPS19253	vehicle is considered to have better performance and fuel economy compared to a conventional one.	Environment and Sustainability



	Solar and Energy Storage Systems	PPS19354	stored electricity is consumed after sundown, during energy demand peaks, or during a power outage.	Environment and Sustainability
	Energy Management and Auditing	PPS19654	Energy Audit is a vital link in the entire management chain. The energy manager, while proposing various courses of action and evaluating their consequences, requires a detailed information base to work from energy audit attempts to balance the total energy inputs with its use and serves to identify all the energy streams in the system and quantifies energy usages according to its discrete function.	Human Values and Professional Ethics

### Regulations 2016

Department	Course name	Course code	Description	Gender, Environment and Sustainability, Human Values and Professional Ethics
<b>Aeronautical</b>	Principles of Helicopter and Maintenance	AE16801	Explain the concepts of Regular Inspections, Preventive Maintenance, Corrective Maintenance, Component Overhaul, Compliance with Regulations and Record Keeping. Both flight and maintenance principles play integral roles in the safe and efficient operation of helicopters, and understanding these concepts is fundamental for pilots and maintenance personnel alike.	Human Values and Professional Ethics
	Aero Engine Repair and Maintenance	AE16351	Help the students appreciate the essential complementarities between values and skills to ensure sustained happiness which are the core appreciations of all human beings. It create an awareness on Engineering Ethics and Human Values	Human Values and Professional Ethics
	Airframe Repair and Maintenance	AE16353	Help the students appreciate the essential complementarities between values and skills to ensure sustained happiness which are the core appreciations of all human beings. It create an awareness on Engineering Ethics and Human Values	Human Values and Professional Ethics
	Entrepreneurship Development	AE16453	Help the students to develop their skill and motivates them to become a successful entrepreneur	Human Values and Professional Ethics

	Aviation Maintenance and Management	AE16452	Help the students appreciate the essential complementarities between values and skills to ensure sustained happiness which are the core appreciations of all human beings. It create an awareness on Engineering Ethics and Human Values	Human Values and Professional Ethics
	Crisis Management in Aircraft Industry	AE16454	Help the students appreciate the essential complementarities between values and skills to ensure sustained happiness which are the core appreciations of all human beings. It create an awareness on Engineering Ethics and Human Values	Human Values and Professional Ethics
	Human Resource Management	AE16451	Help the students appreciate the essential complementarities between values and skills to ensure sustained happiness which are the core appreciations of all human beings. It create an awareness on Engineering Ethics and Human Values	Human Values and Professional Ethics
<b>Agricultural Engineering</b>	Sustainable Agriculture and Food Security	AI16801	Helps the students to to know about the importance of land resources , food security,ecological balance and to know the policies and programmes for sustainable agriculture.	Environment and Sustainability
	Organic Farming Technologies	AI 16351	Help the students to develop their skill on the organic farming technologies and different crop production practices and will be exposed to post harvest technologies ,exports and market avenues.	Environment and Sustainability
	Agricultural Waste Management	AI16354	learn about various composting techniques,briquitting techniques,production of bio char and utize the agricultural waste in an eco friendly manner.	Environment and Sustainability
	Entrepreneurship Development	BA16451	Helps the students to to know about the basic concepts in Competencies and various factors for starting a business, finances and accounting and to know about the role of governmet agencies in promoting entrepreneurship.	Human Values and Professional Ethics
<b>Biomedical Engineering</b>	Healthcare and Hospital Management	BM16801	Helps the students to to know about the basic concepts in Hospital Management, Customer orientation and retention, facilitate hospital planning activities and learn equipment maintenance skills.	Environment and Sustainability
	Medical Ethics standards and Safety	BM16354	This apply ethical principles and commit to professional ethics and responsibilities and norms of the hospital safety standards.	Human Values and Professional Ethics
	Medical Radiation Safety	BM16654	Helps students to understand the importance of radiation levels, aware of nuclear medicines and precautions, learn about the safety measures by using LASER and ultraviolet radiations.	Human Values and Professional Ethics
<b>Chemical Engineering</b>	Process Economics and management	CM16703	Explain the concepts and importance of planning and types of organization, give knowlwdge on value of money and how to utilize for the projects and further on balance sheet, idea of economics growth and balance.	Human Values and Professional Ethics

	Alternative Energy Technology	CM16801	Explain the fundamentals of energy conversion in applications, sources, conversion technologies of nuclear and fossil fuels, principles of power generation, application of biomass, conservation and audit.	Environment and Sustainability
	Corrosion Engineering	CM16903	Give an insight into all aspects of corrosion and testing methods, corrosion inhibition for protection of process equipments, knowledge of corrosion inspection and management in chemical industries. Explain the control corrosion and select materials for different applications, and impact of corrosion on nations economy.	Environment and Sustainability
	Fertilizer Technology	CM16351	Explain an understanding of the basic concepts of fertilizer technology, various types of fertilizers, manufacturing techniques of fertilizer, design of the equipments in fertilizer industry and the methodology and techniques in real life.	Environment and Sustainability
	Petroleum Refining Engineering	CM16453	Explain the formation and composition of petroleum, properties and testing methods for crude and petroleum products, the various treatment techniques of petroleum, process of petroleum products and the material and energy balance.	Environment and Sustainability
	Total Quality Management	BA16523	Explain the basic concepts in Quality Management- Customer orientation and retention, describe the principles and process of Quality Management, the quality control techniques in Six Sigma, explain the basic concepts in Quality Function Development and TPM, the elements in Quality System- Quality Auditing and HR practices	Human Values and Professional Ethics
<b>Civil Engineering</b>	Estimation, Costing and Valuation Engineering	CE16701	This course describes Calculation of earthwork excavation, brick work and RCC works in arches, Estimating of septic tank, Aqueduct, Schedule of rates, Contracts, Calculation of Standard rent, Principles for report preparation, etc.	Environment and Sustainability
	Structural Dynamics and Earthquake Engineering	CE16702	this course includes Response to harmonic forces and periodic forces, Eigen values and Eigen vectors, Elements of Engineering Seismology, Effect of earthquake on different types of structures, Lessons learnt from past earthquakes, Earthquake resistant design of R.C.C. buildings, etc.	Environment and Sustainability
	Irrigation Engineering	CE16703	this course intends consumptive use of crops, Irrigation methods, Diversion Head works - Weirs and Barrages, Canal drop, Modernization techniques, etc.	Environment and Sustainability
	Prestressed Concrete Structures	CE16704	This course describes Basic principles of prestressing, strength concept and load balancing concept, Design for shear based on I.S. 1343 Code, Design of anchorage zone reinforcement, Analysis for secondary moments, Partial prestressing, etc.	Environment and Sustainability

Industrial Waste Water Engineering	CE16251	this course includes Uses of water by Industry, Regulatory requirements for Industrial wastewater, Evaluation of Pollution Prevention Options, Cost benefit analysis, Advanced oxidation and Tertiary Treatment processes for removal of dissolved organics and inorganics, Dewatering and Disposal of Sludge, Wastewater characteristics, Pollution Prevention Options etc.	Environment and Sustainability
Traffic Engineering and Management	CE16252	This course includes Fundamentals of Traffic Flow, Traffic Surveys, Traffic signs and road markings, Air and Noise Pollution, Intelligent Transportation Systems , etc.	Environment and Sustainability
Municipal Solid Waste Management	CE16253	This course describes Principle of solid waste management, On-site storage methods , Methods of Collection, Processing techniques and Equipment, Dumping of solid waste, etc.	Environment and Sustainability
Railways, Airports and Harbour Engineering	CE16254	This course includes Geometric design of railway, gradient, super elevation, widening of gauge on curves – Level Crossings, Construction and maintenance of tracks, parking and Circulation Area, Runway and Taxiway Markings, Structures and Coastal Protection Works, etc.	Environment and Sustainability
Disaster Management	CE16907	This course describes Do's and Don'ts during various types of Disasters, Processes and Framework at State and Central Level, Factors affecting Vulnerabilities, Hazard and Vulnerability profile of India, Disaster Damage Assessment, Landslide Hazard Zonation, etc.	Environment and Sustainability
Environmental Impact Assessment	CE16910	This course intends Environmental Impact Statement, Methods of EIA, Assessment of Impact on land, Addressing the issues related to the Project affected people, Water Supply and Drainage Projects, etc.	Environment and Sustainability
Environmental and Irrigation Engineering Drawing	CE16705	this course describes Design and Drawing of rapid sand filter, Design and Drawing of septic tank, Design and Drawing of canal drop, Design and Drawing of syphon aqueduct, etc.	Environment and Sustainability
Principles of Management	BA16254	this course contents Geometric design of railway, gradient, super elevation, widening of gauge on curves, Calculation of Materials required for track laying, parking and Circulation Area, Runway and Taxiway Markings, Structures and Coastal Protection Works, etc.	Human Values and Professional Ethics

	Maintenance, Repair and Rehabilitation of Structures	CE16353	This course includes Assessment procedure for evaluating a damaged structure, Quality assurance for concrete, Concrete made with industrial wastes, Non-destructive Testing Techniques, Strengthening of Structural elements, Engineered demolition methods.	Environment and Sustainability
	Advanced Surveying using Total Station	CE16952	This course intends Basic Principles of Total Station, Fundamental Parameters of Total Station, Data Collection operating procedures, etc.	Environment and Sustainability
	Building Valuation	CE16953	This course includes Principles of Valuation, Sinking fund, salvage and scrap value, Method of calculation of Standard rent concept of Capitalized value and Years Purchase, etc.	Environment and Sustainability
<b>Computer Science And Engineering</b>	Professional Ethics and Human Values	BA16151	Help the students appreciate the essential complementarities between values and skills to ensure sustained happiness which are the core appreciations of all human beings. It create an awareness on Engineering Ethics and Human Values	Human Values and Professional Ethics
	Green Computing	CS16904	Consist of the basic and important things of environmentally responsible and eco-friendly use of computers and their resources. This course also explains the study of designing, engineering, manufacturing, using and disposing of computing devices in a way that reduces their environmental impact.	Human Values and Professional Ethics
<b>Electronics And Communication Engineering</b>	Electromagnetic interference and compatibility	EC16353	EMI ENVIRONMENT,-examine, test and implement EMI system	Environment and Sustainability
	Biosignal processing	EC16454	Measures of diagnostic accuracy and Cost, Reliability classifiers and decisions	Human Values and Professional Ethics
	Radar and navigational aids	EC16904	Propagation effects	Human Values and Professional Ethics

	Automotive Electrical And Electronics System	EC16907	Battery Rating,ELECTRONIC ENGINE MANAGEMENT SYSTEM	Environment and Sustainability
<b>Food Technology</b>	Entrepreneurship Development	FT16553	Help the students to develop their skill and motivates them to become a successful entrepreneur	Human Values and Professional Ethics
	Food waste and Management	FT16554	Helps the students to know about the basic concepts in food waste and quality management. To understanding the quality management principles and process.	Environment and Sustainability
<b>Information Technology</b>	Professional Ethics and Human Values	BA16151	Help the students to develop their skill and values related to education and motivates them to become a successful learner	Human Values and Professional Ethics
<b>Mechanical Engineering</b>	Professional Ethics and Human Values	BA16151	Helps the students to understand the norms and code in the profession to achieve the goal.Also, understand the values of human society and professional environment.	Human Values and Professional Ethics
	Safety Engineering and Environmental Systems	ME16905	learn about pollution of natural resources by socio economic activities of human, acquire scientific knowledge on environment and its impact on eco systems, learn about pollution of natural resources by socio economic activities of human, understand the natural resources and its exploitation, know the role of human population, information technology on environment protection	Environment and Sustainability
	Entrepreneurship Development	BA16451	Help the students to develop their skill and motivates them to become a successful entrepreneur	Human Values and Professional Ethics
<b>Mechatronics</b>	Renewable Energy Sources	MT16453	Explain the concepts of different types of water sources, water quality parameters and factors governing selection of a good water source and conventional water treatment. This course also explains the social issues with regard to the environment.	Environment and Sustainability

<b>Medical Electronics</b>	Healthcare and Hospital Management	MD16703	Helps the students to to know about the basic concepts in Hospital Management, Customer orientation and retention, facilitate hospital planning activities and learn equipment maintenance skills.	Environment and Sustainability
	Medical Ethics and Safety	MD16354	This apply ethical principles and commit to professional ethics and responsibilities and norms of the hospital safety standards.	Human Values and Professional Ethics
<b>Pharmaceutical Technology</b>	Validation in Pharmaceutical Industries	PT16253	Process validation of a process will ensure production of drug of reproducible quality. In pharmaceutical industry, Process Validation performs this task to build the quality into the product because according to ISO 9000:2000, it had proven to be an important tool for quality management of pharmaceuticals	Human Values and Professional ethics
	Diagnostics And Therapeutics	PT16353	Its very much helpful for the students to know about the Hospital management in a computer system that helps manage the information related to health care and aids in the job completion of health care providers effectively. They manage the data related to all departments of healthcare such as, Clinical, Financial, Laboratory etc.,.	Human Values and Professional ethics
	Research Methodology	PT16352	Identifying the Research problems and collect the suitable data for Research. Write research proposals and Reports and apply their research work for patent through IPR.	Human Values and Professional ethics
<b>M.E Power Systems Engineering</b>	Technical Seminar I	PPS16106	This includes topics such as reading/writing/listening comprehension, note taking, summarizing, report writing, along with elements of grammar and vocabulary. It is used to express that knowledge in a clear, concise, and coherent manner.	Human Values and Professional Ethics
	Technical Seminar II	PPS16206	This includes topics such as reading/writing/listening comprehension, note taking, summarizing, report writing, along with elements of grammar and vocabulary. It is used to express that knowledge in a clear, concise, and coherent manner.	Human Values and Professional Ethics