

1.2.2 - Additional Information - List of Electives Offered (Data for the latest completed academic year)

| Name of Programmes adopting elective course system | Course Code | Course Name | Course Type |
|--|-------------|--|------------------------------|
| B.E AERONAUTICAL ENGINEERING | AE16901 | Aircraft Rules and Regulations | Open Elective |
| | AE16902 | Wind Power Engineering | |
| | AE16903 | Aircraft Safety | |
| | AE16904 | Active Control Technology | |
| | AE16911 | Corrosion Of Aerospace Materials | |
| | AE16912 | Design of Flight Control System | |
| | AE16913 | Satellite Technology | |
| | AE16914 | Mathematical Methods in Modern Aviation | |
| | AE16151 | Principles of UAV and MAV | Professional Elective |
| | AE16152 | Experimental Stress Analysis | |
| | AE16153 | Aircraft Communication And Navigation System | |
| | AE16154 | Air Traffic control and Planning | |
| | AE16251 | Industrial Aerodynamics | |
| | AE16252 | Experimental Aerodynamics | |
| | AE16253 | Hypersonic Aerodynamics | |
| | AE16254 | Wind Tunnel Techniques | |
| | AE16351 | Aero Engine Repair and Maintenance | |
| | AE16352 | Aviation Fuels and Combustion | |
| | AE16353 | Airframe Repair and Maintenance | |
| | AE16354 | Fatigue and Fracture | |
| | AE16451 | Human Resource Management | |
| | AE16452 | Aviation Maintenance Management | |
| | AE16453 | Entrepreneurship Development | |
| | AE16454 | Crisis Management in Aircraft Industry | |
| B.E.AGRICULTURE ENGINEERING | AI16901 | Energy Management in Agriculture | Open Elective |
| | AI16902 | Climate Change and Adaptation | |
| | AI16903 | Professional Ethics in Agriculture Engineering | |
| | AI16904 | Engineering | |
| | AI16905 | Agricultural Waste Management | |
| | AI16906 | Ergonomics and Safety in Agriculture Engineering | |
| | AI16907 | Automation in Irrigation | |
| | AI16908 | Forest Resource Management | |
| | AI16151 | Industrial Safety Management | Professional Elective |
| | AI16152 | Farm Power and Machinery Management | |
| | AI16153 | Watershed Management | |
| | BA16451 | Entrepreneurship Development | |
| | AI16251 | Seed Production Technology | |
| | AI16252 | Landscape Design and Site Planning | |
| | AI16253 | Energy and Environmental Auditing and its Management | |
| | AI16254 | On-Farm Water Management | |
| | AI16351 | Organic Farming Technologies | |
| | AI16352 | Micro Irrigation Systems | |
| | AI16353 | Mechanics of Tillage and Traction | |
| | AI16354 | Agricultural Business Management | |
| | AI16451 | Horticulture Crop Process Engineering | |

| | | | |
|---|---------|--|----------------------------------|
| | AI16452 | Disaster Management | |
| | AI16453 | Special Farm Machinery and Equipments | |
| | AI16454 | Renewable Energy Resources and Technology | |
| B.E CIVIL ENGINEERING | CE16901 | Building Services | Open Elective |
| | CE16902 | Contract Laws and Regulations | |
| | CE16903 | Architecture | |
| | CE16904 | Smart Structures and Smart Materials | |
| | CE16905 | Remote Sensing Techniques and GIS | |
| | CE16906 | Computer Aided Design of Structures | |
| | CE16907 | Disaster Management | |
| | CE16908 | Finite Element Techniques | |
| | CE16909 | Engineering Economics and Cost Analysis | |
| | CE16910 | Environmental Impact Assessment | |
| | CE16151 | Hydrology and Water Resources Engineering | Professional Elective |
| | CE16152 | Total Station and GPS Surveying | |
| | CE16153 | Construction Planning and Scheduling | |
| | CE16154 | Air pollution and Control Engineering | |
| | CE16155 | Coastal Engineering | |
| | CE16251 | Industrial Waste Water Engineering | |
| | CE16252 | Traffic Engineering and Management | |
| | CE16253 | Municipal Solid Waste Management | |
| | CE16254 | Railways, Airports and Harbour Engineering | |
| | MA16751 | Operations Research | |
| | CE16351 | Power plant Structures | |
| | CE16352 | Bridge Structures | |
| | CE16353 | Maintenance, Repair and Rehabilitation of Structures | |
| | BA16253 | Total Quality Management | |
| | BA16151 | Professional Ethics And Human Values | |
| | CE16451 | Ground Improvement Techniques | |
| | CE16452 | Prefabricated Structures | |
| | CE16453 | Industrial Structures | |
| | CE16454 | Tall Structures | |
| | CE16455 | Introduction to Soil Dynamics and Machine | |
| B.E - COMPUTER SCIENCE AND ENGINEERING | CS16901 | R and Python Programming | Open Elective |
| | CS16902 | Fundamentals of Database System | |
| | CS16903 | E - Commerce | |
| | CS16904 | Green Computing | |
| | CS16905 | Web Content Development | |
| | MA16151 | Discrete Mathematics | Professional Elective |
| | CS16151 | XML and Web Services | |
| | BA16254 | Principles of Management | |
| | CS16152 | Big Data Analytics | |
| | CS16153 | Parallel Computing | |
| | CS16251 | Semantic Web | |
| | CS16252 | Wireless Sensor Networks | |
| | CS16253 | Data Science | |
| | CS16254 | Internet of Things | |
| | BA16351 | Engineering Economics and Financial Accounting | |
| | CS16351 | Advanced Database Technology | |


DEAN - ACADEMICS

Paavai Engineering College
NH-44, Pachal Post, Namakkal Dist.


PRINCIPAL,
PAVAI ENGINEERING COLL.
NH-7, PACHAL Post, Namakkal Dist.

| | | | |
|--|---------|--|----------------------------------|
| | CS16352 | Ad-hoc Networks | |
| | CS16353 | Graph Theory and Applications | |
| | CS16354 | User Interface Design | |
| | CS16355 | Distributed Systems | |
| | CS16451 | Agile Software Development | |
| | CS16452 | Service Oriented Architecture | |
| | CS16453 | Digital Image Processing | |
| | CS16454 | Soft Computing | |
| | BA16451 | Entrepreneurship Development | |
| | CS16551 | Software Testing | |
| | CS16552 | Robotics | |
| | CS16553 | Machine Learning | |
| | CS16554 | Mobile Computing | |
| | MA16851 | Resource Management Techniques | |
| B.E-ELECTRONICS AND COMMUNICATION ENGINEERING | EC16901 | Microcontroller Based System Design | Open Elective |
| | EC16902 | Biomedical Instrumentation | |
| | EC16903 | 5G Technology | |
| | EC16904 | Radar and Navigational aids | |
| | EC16904 | PLC and DCS | |
| | EC16904 | Nano Scale Devices | |
| | EC16907 | Automotive Electrical and Electronics System | |
| | EC16151 | Transmission Lines and Wave Guides | Professional Elective |
| | EC16152 | Information Theory | |
| | IT16403 | Operating Systems | |
| | MA16501 | Numerical Methods | |
| | EC16251 | Wireless Sensor Networks | |
| | EC16252 | Digital Switching and Transmission Systems | |
| | EC16253 | Advanced Microprocessors | |
| | BA16253 | Total Quality Management | |
| | EC16351 | Digital Image Processing | |
| | EC16352 | Speech Processing | |
| | EC16353 | Electromagnetic Interference and Compatibility | |
| | EC16354 | Telecommunication System modeling and simulation | |
| | EC16451 | Television Signal Processing and Display Systems | |
| | EC16452 | Space Time Communication | |
| | EC16453 | Web Technology | |
| | EC16454 | Biosignal Processing | |
| | EC16551 | Optoelectronic Devices | |
| | EC16552 | Micro-Electro-Mechanical Systems | |
| | EC16553 | Mobile Operating Systems | |
| | EC16554 | Multimedia Compression and Communication | |
| | EC16651 | Medical Electronics | |
| | EC16652 | Cellular and Mobile Communication | |
| | EC16653 | RF Microelectronics | |
| | EC16654 | Virtual Instrumentation | |

| | | | |
|--|---------|---|------------------------------|
| B.E- ELECTRICAL AND ELECTRONICS ENGINEERING | EE16901 | Micro Electro Mechanical System | Open Elective |
| | EE16902 | Industrial Robotics | |
| | EE16903 | Soft Computing Techniques | |
| | EE16904 | Wind and Solar Energy Systems | |
| | EE16905 | Embedded System Design | |
| | EE16906 | Solar and Wind Energy Engineering | |
| | EE16151 | Bio Medical Engineering | Professional Elective |
| | EE16152 | Electrical Safety | |
| | EE16153 | Digital Control Engineering | |
| | EE16154 | Nano Science | |
| | EE16155 | Network Analysis and Synthesis | |
| | EE16251 | VLSI Design and Circuits | |
| | EE16252 | Power System Dynamics | |
| | EE16253 | Flexible AC Transmission System | |
| | EE16254 | Optoelectronic Devices | |
| | MA16153 | Operations Research | |
| | EE16351 | EHV AC and DC Transmission | |
| | EE16352 | Energy Auditing | |
| | EE16353 | High Voltage Engineering | |
| | EE16354 | Computer Networks | |
| | EE16355 | Design with PIC Microcontroller | |
| | EE16451 | Testing and Commission of Electrical Equipments | |
| | EE16452 | Power Quality | |
| | EE16453 | Virtual Instrumentation | |
| | EE16454 | Computer Aided Design of Electrical Machines | |
| | BA16253 | Total Quality Management | |
| B.E - MECHANICAL ENGINEERING | ME16901 | Renewable Energy Sources | Open Elective |
| | ME16902 | Quality Control and Reliability Engineering | |
| | ME16903 | Industrial Psychology and Work Ethics | |
| | ME16904 | Energy Conservation and Management | |
| | ME16905 | Safety Engineering and Environmental Systems | |
| | ME16906 | Plant Layout and Material Handling | |
| | ME16151 | Unconventional Machining Processes | Professional Elective |
| | ME16152 | Rapid Prototyping | |
| | ME16153 | Theory of Metal Forming | |
| | ME16154 | Solar Energy System | |
| | ME16155 | Foundry Technology | |
| | ME16251 | Maintenance Engineering | |
| | ME16252 | Non-Destructive Evaluation Techniques | |
| | ME16253 | Design of Jigs, Fixtures and Press Tools | |
| | ME16254 | Micro Electro Mechanical Systems | |
| | ME16255 | CNC Technology | |
| | ME16351 | Productivity Management and Re-Engineering | |
| | ME16352 | Tool Design | |
| | ME16353 | Welding Technology | |
| | ME16354 | Composite Materials and Mechanics | |
| | BA16451 | Entrepreneurship Development | |
| | ME16451 | Production Planning and Control | |


DEAN - ACADEMICS
 Paavai Engineering College
 NH-44, Pachal Post, Namakkal Dist.


PRINCIPAL
 PAAVAI ENGINEERING COLLEGE
 NH-7, PACHAL Post, Namakkal Dt

| | | | |
|--|---------|--|----------------------------------|
| | ME16452 | Refrigeration and Air Conditioning | |
| | ME16453 | Industrial Tribology | |
| | ME16454 | Advanced I.C. Engines | |
| | BA16352 | Engineering Economics | |
| B.E - MECHATRONICS | MT16901 | Industrial Engineering | Open Elective |
| | MT16902 | Mechatronics | |
| | MT16903 | Micro Electro Mechanical Systems | |
| | MT16904 | Biomedical Instrumentation | |
| | MT16905 | Non-Destructive Testing | |
| | MT16906 | Vetronics | |
| | MT16907 | Industrial Automation | |
| | MT16908 | Advanced Manufacturing Management | |
| | MT16909 | Intelligent Manufacturing Technology | |
| | MT16910 | Nano Technology | |
| | MT16151 | Advanced Manufacturing Processes | Professional Elective |
| | MT16152 | Digital Signal Processing | |
| | MT16153 | Diagnostic Techniques | |
| | MT16154 | Modelling and Simulation in Engineering | |
| | MT16155 | Product Design and Costing | |
| | MT16251 | Engineering Economics and Cost Analysis | |
| | MT16252 | Additive Manufacturing | |
| | MT16253 | Embedded System Design | |
| | MT16254 | Design of Jigs, Fixtures and Press Tools | |
| | IT16255 | Computer Networks | |
| | MT16351 | Mechatronics Systems Design | |
| | MT16352 | Finite Element Analysis | |
| | MT16353 | Non-Traditional Machining Processes | |
| | MT16354 | Industrial Electronics and Applications | |
| | BA16254 | Principles of Management | |
| | MT16451 | Computational Fluid Dynamics | |
| | MT16452 | Advanced Sensor Technology | |
| | MT16453 | Renewable Energy Sources | |
| | BA16253 | Total Quality Management | |
| | IT16456 | Database Management Systems | |
| | MT16551 | Intellectual Property Rights | |
| | MT16552 | Artificial Intelligence | |
| | MT16553 | Concepts of Engineering Design | |
| | MT16554 | Internal Combustion Engines | |
| | MT16555 | Flexible Manufacturing Systems | |
| B.E. - BIOMEDICAL ENGINEERING | BM16902 | Industrial Nanotechnology | Open Elective |
| | BM16903 | Basics of Microscopy | |
| | BM16904 | Introduction to Data science | |
| | BM16905 | Disaster Management | |
| | BM16151 | Biomedical Informatics | Professional Elective |
| | BM16152 | Virtual Bioinstrumentation | |
| | BM16153 | BioMEMS | |
| | BM16154 | Medical Optics | |
| | BM16251 | Telemedicine and PACS | |
| | BM16252 | Biomedical Laser Instruments | |
| | BM16253 | Pattern Recognition and Neural Networks | |


DEAN - ACADEMICS
 Paavai Engineering College
 NH-44, Pachal Post, Namakkal Dist.


PRINCIPAL,
PAAVAI ENGINEERING COLLEGE,
 NH-7, PACHAL Post, Namakkal Dt

| | | | |
|-------------------------------------|---------|---|----------------------------------|
| | BM16254 | Advanced Bioanalytical and Therapeutic techniques | |
| | BM16351 | Tissue Engineering | |
| | BM16352 | Rehabilitation Engineering | |
| | BM16353 | Design and Development of Medical Devices | |
| | BM16354 | Nanotechnology and Applications | |
| | BM16451 | Biometric Systems | |
| | BM16452 | Medical Ethics Standards and Safety | |
| | BM16453 | Advanced Healthcare System Design | |
| | BM16454 | Advanced Medical Imaging Systems | |
| | BM16551 | Artificial Organs and Implants | |
| | BM16552 | Embedded Systems and IoT in Healthcare | |
| | BM16553 | Physiological Modeling | |
| | BM16554 | Robotics and Automation in Medicine | |
| | BM16651 | Virtual Reality in Medicine | |
| | BM16652 | Wearable Systems | |
| | BM16653 | Quality Control in Biomedical Engineering | |
| | BM16654 | Medical Radiation Safety | |
| | BM16751 | Medical Waste Management | |
| | BM16752 | Advanced Biomedical Instrumentation | |
| | BM16753 | Telehealth Technology | |
| | BM16751 | Brain Computer Interface | |
| B.E.-MEDICAL ELECTRONICS | MD16901 | Biomedical Equipments | Open Elective |
| | MD16902 | Basics of Bioinformatics | |
| | MD16903 | Product design and development | |
| | MD16904 | Analytical Methods and Instrumentation | |
| | MD16151 | Robotics and Automation | Professional Elective |
| | MD16152 | Neural Network and its applications | |
| | MD16153 | Bio MEMS | |
| | MD16154 | Nano Technology and its applications | |
| | MD16251 | VLSI Design | |
| | MD16252 | Pattern Recognition | |
| | MD16253 | Medical Expert Systems | |
| | MD16254 | Introduction to Cloud Computing | |
| | MD16351 | Medical Devices Regulations | |
| | MD16352 | Fundamentals of Nano science | |
| | MD16353 | Physiological System Modelling | |
| | MD16354 | Medical Ethics and Safety | |
| | MD16451 | Smart Wearable Systems | |
| | MD16452 | Advanced Medical Instrumentation Technology | |
| | MD16453 | Deep Learning | |
| | MD16454 | Introduction to Mobile App Development | |
| | MD16551 | Body Area Network | |
| | MD16552 | Multimedia Applications | |
| | MD16553 | Telehealth Technology | |
| | MD16554 | Embedded Systems and Internet of Things in Healthcare | |
| | MD16651 | Virtual Instrumentation | |
| | MD16652 | Digital Video Processing | |
| | MD16653 | Biosensors | |
| | MD16654 | Brain Computer Interface and its Applications | |

| | | | |
|---|---------|--|----------------------------------|
| B.TECH-CHEMICAL ENGINEERING | CM16901 | Solid Waste Management | Open Elective |
| | CM16902 | Industrial Wastewater Treatment | |
| | CM16903 | Corrosion Engineering | |
| | CM16904 | Process Instrumentation | |
| | CM16151 | Biochemical Engineering | |
| | CM16152 | Drugs and Pharmaceutical Technology | Professional Elective |
| | CM16153 | Pulp and Paper Technology | |
| | CM16154 | Fundamentals of Nano science | |
| | CM16251 | Oil and Natural Gas Engineering | |
| | CM16252 | Polymer Technology | |
| | CM16253 | Food Technology | |
| | CM16254 | Green Chemistry and Engineering | |
| | CM16351 | Fertilizer Technology | |
| | CM16352 | Process Optimization | |
| | CM16353 | Computational Fluid Dynamics | |
| | CM16354 | Piping Engineering | |
| | CM16451 | Process Modelling and Simulation | |
| | CM16452 | Modern Separation Processes | |
| | CM16453 | Petroleum Refining Engineering | |
| | BA16253 | Total Quality Management | |
| B.TECH- INFORMATION TECHNOLOGY | IT16901 | Green Computing | Open Elective |
| | IT16902 | Information Technology Essentials | |
| | IT16903 | Open Source Technologies | |
| | MA16151 | Discrete Mathematics | Professional Elective |
| | IT16151 | Theory of Computation | |
| | IT16152 | Information Coding Techniques | |
| | IT16153 | User Interface Design | |
| | IT16154 | Artificial Intelligence | |
| | IT16251 | Open Source Software | |
| | IT16252 | Distributed Systems | |
| | BA16351 | Engineering Economics and Financial Accounting | |
| | IT16253 | TCP/IP Protocol Design and Implementation | |
| | IT16254 | System Software | |
| | IT16351 | Adhoc and Sensor Networks | |
| | IT16352 | C# And .Net Framework | |
| | IT16353 | Software Quality Assurance | |
| | IT16354 | Big Data and Analytics | |
| | IT16355 | Internet of Things | |
| | IT16451 | J2EE | |
| | IT16452 | Agile Software Development | |
| | IT16453 | Machine Learning | |
| | IT16454 | Software Testing | |
| | IT16455 | Soft Computing | |
| | IT16551 | Digital Enterprise Resource Planning | |
| | IT16552 | Service Oriented Architecture | |
| | IT16553 | Foundations of Blockchain Technology | |
| | IT16554 | Social Network Analysis | |
| | BA16253 | Total Quality Management | |


DEAN - ACADEMICS
 Paavai Engineering College
 NH-44, Pachal Post, Namakkal Dist.


PRINCIPAL,
PAAVAI ENGINEERING COLLEGE
 NH-44, PACHAL Post, Namakkal Dist.


| | | | |
|---|----------|--|------------------------------|
| B.TECH-FOOD TECHNOLOGY | FT16901 | Fundamental of Food Processing | Open Elective |
| | FT16902 | Food Chemistry of Macronutrients | |
| | FT16153 | Food additives and nutraceuticals | Professional Elective |
| | FT16151 | Milling Technology | |
| | FT16152 | Technology of Fats and Oils | |
| | FT16154 | Bioprocess Engineering | |
| B.TECH-PHARMACEUTICAL TECHNOLOGY | PT16509 | Herbal Technology | Open Elective |
| | PT16510 | Technology of Fine Chemicals and Bulk Drugs | |
| | PT16506 | Basic Laboratory Animal Science | Professional Elective |
| | PT16507 | Fundamentals of Material Science and Engineering | |
| | PT16508 | Technology of Semisolid Dosage Forms | |
| | BA16G06 | Disaster Management | |
| | PT16606 | Biological Spectroscopy | |
| | PT16607 | Fundamentals of Polymer Science and Engineering | |
| | PT16608 | Validation in Pharmaceutical Industries | |
| | PT16609 | Fundamentals of Nanoscience | |
| M.E - COMPUTER SCIENCE AND ENGINEERING | PMA19901 | Operations Research | Open Elective |
| | PCE19901 | Business Analytics | |
| | PED19901 | Industrial Safety | |
| | PSE19901 | Cost Management of Engineering Projects | |
| | PED19902 | Composite Materials | |
| | PED19903 | Waste to Energy | |
| | PCE19151 | Data Preparation and Analysis | Professional Elective |
| | PCE19152 | Secure Coding | |
| | PCE19153 | Introduction to Intelligent Systems | |
| | PCE19154 | Pattern Recognition | |
| | PCE19251 | Storage Area Network | |
| | PCE19252 | Data Storage Technologies and Network | |
| | PCE19253 | Ethical Hacking | |
| | PCE19254 | Data Virtualization Techniques | |
| | PCE19351 | Knowledge Discovery | |
| | PCE19352 | Secure Software Design and Enterprise Computing | |
| | PCE19353 | Computer Vision | |
| | PCE19354 | Software Design | |
| | PCE19451 | Human and Computer Interaction | |
| | PCE19452 | GPU Computing | |
| | PCE19453 | Digital Forensics | |
| | PCE19454 | Advanced wireless and mobile networks | |
| | PCE19551 | Mobile Application and Services | |
| | PCE19552 | High Performance Computing | |
| | PCE19553 | Cryptocurrency and Blockchain Technologies | |
| | PCE19554 | Agile Software Development | |
| | PCE16351 | Internet of Things | |
| | PCE16352 | Real Time Systems | |
| | PCE16353 | Computer Vision | |
| | PCE16354 | Research Methodology | |

| | | | |
|---|----------|---|----------------------------------|
| | PCE16355 | Design and Analysis of Parallel Algorithms | |
| | PCE16451 | Model Checking and Program Verification | |
| | PCE16452 | Robotics | |
| | PCE16453 | Bio - inspired Computing | |
| | PCE16454 | Pattern Recognition and Analysis | |
| | PCE16455 | Multimedia Systems | |
| M.E- COMMUNICATION SYSTEMS | PCS19151 | Data Compression Techniques | Professional Elective |
| | PCS19152 | Electromagnetic Interference and Compatibility in system design | |
| | PCS19153 | Advanced Digital Image Processing | |
| | PCS19154 | MEMS and NEMS | |
| | PCS19251 | Fiber Optic Networks | |
| | PCS19252 | Millimeter Wave Communication | |
| | PCS19253 | Pattern Recognition and Machine Learning | |
| | PCS19254 | Internet of Things | |
| | PCS19351 | Satellite Communication | |
| | PCS19352 | Optimization Techniques | |
| | PCS19353 | Digital Communication Receivers | |
| | PCS19354 | Soft Computing | |
| | PCS19451 | Network Routing Algorithms | |
| | PCS19452 | DSP Processor Architecture and Programming | |
| | PCS19453 | MobileCommunication Systems and Standards | |
| | PCS19454 | Radar Signal Processing | |
| | PCS16551 | High Performance Networks | |
| | PCS16552 | Speech Processing and Synthesis | |
| | PCS16553 | DSP Processor Architecture and Programming | |
| | PCS16554 | Neural Network and Applications | |
| | PCS16651 | Wavelet transform and its applications | |
| | PCS16652 | Smart Antennas | |
| | PCS16653 | Internetworking Multimedia | |
| | PCS16654 | VLSI for Wireless Communication | |
| M.E - ENGINEERING DESIGN | PED19251 | Advanced Engineering Materials | Professional Elective |
| | PED19252 | Mechanics of Composite Materials | |
| | PED19253 | Analysis and Synthesis of Mechanisms | |
| | PED19254 | Mechatronics in Manufacturing | |
| | PED19151 | Advanced Machine Design | |
| | PED19152 | Design for Manufacturing and Assembly | |
| | PMA19153 | Mathematical Methods in Engineering | |
| | PED19153 | Rapid Prototyping and Tooling | |
| | PED19351 | Tribology in Design | |
| | PED19352 | Robotics | |
| | PED19353 | Fracture Mechanics | |
| | PED19354 | Reverse Engineering | |
| | PED19451 | Multi-body Dynamics | |
| | PED19452 | Condition Based Monitoring | |
| | PED19453 | Optimization Techniques in Design | |


DEAN - ACADEMICS
 Paavai Engineering College
 NH-44, Pachal Post, Namakkal Dist.


PRINCIPAL,
PAAVAI ENGINEERING COLLEGE
 NH-7, PACHAL Post, Namakkal Dt.

| | | | |
|--------------------------------------|----------|--|------------------------------|
| | PED19454 | Design of Hydraulic and Pneumatic systems | |
| | PED16451 | Engineering Fracture Mechanics | |
| | PED16452 | Tribology in Design | |
| | PED16453 | Design of Heat exchanger | |
| | PED16454 | Applied Engineering Acoustics | |
| | PED16551 | Productivity Management and Re-Engineering | |
| | PED16552 | Plasticity and Metal Forming | |
| | PED16553 | Reverse Engineering | |
| | PED16554 | Design of Material Handling Equipments | |
| | PED16651 | Design of Hydraulic and Pneumatic systems | |
| | PED16652 | Theory of Plates and Shells | |
| | PED16653 | Design of Pressure Vessel and Piping | |
| | PED16654 | Modal Analysis of Mechanical Systems | |
| M.E POWER SYSTEMS ENGINEERING | PPS19151 | Power Electronics for Renewable Energy Systems | Open Elective |
| | PPS19152 | Smart Grids | |
| | PPS19153 | High Power Converters | |
| | PPS19154 | Wind and Solar Systems | Professional Elective |
| | PMA19152 | Mathematical Methods in Power Engineering | |
| | PPS19251 | Electrical Power Distribution System | |
| | PPS19252 | Analysis and Design of Power Converters | |
| | PPS19253 | Electric and Hybrid Vehicles | |
| | PPS19351 | Restructured Power Systems | |
| | PPS19352 | Advanced Digital Signal Processing | |
| | PPS19353 | Dynamics of Electrical Machines | |
| | PPS19354 | Solar and Energy Storage Systems | |
| | PPS19451 | Advanced Microcontroller Based Systems | |
| | PPS19452 | SCADA System and Application | |
| | PPS19453 | Power Quality | |
| | PPS19454 | Artificial Intelligence and its Application | |
| | PPE16151 | Analysis of Inverters | |
| | PPS16152 | Power System Security | |
| | PPS16153 | Linear and Non-Linear System Theory | |
| | PPS16251 | High Voltage Direct Current Transmission | |
| | PPS16252 | Power Quality Analysis | |
| | PPE16253 | Electrical Grounding | |
| | PPS16451 | Deregulation of Power System | |
| | PPS16452 | Distributed Generation and Micro grid | |
| | PPS16453 | Industrial Power System Analysis and Design | |
| | PPS16551 | Advanced Power System Dynamics | |
| | PPS16552 | Smart Grid Design and Analysis | |
| | PPS16553 | Computer Aided Power Systems Analysis | |
| | PPS16651 | Applications of MEMS Technology | |
| | PPE16652 | VLSI Design Techniques | |
| | PPE16653 | Virtual Instrumentation Systems | |
| M.E -STRUCTURAL ENGINEERING | PSE19151 | Theory of Plates | Professional Elective |
| | PSE19152 | Advanced Concrete Technology | |


DEAN - ACADEMICS
 Paavai Engineering College
 NH-44, Pachal Post, Namakkal Dist.


PRINCIPAL
 PAVAI ENGINEERING CO.
 NH-44, Pachal Post, Namakkal Dist.

| | | | |
|--|----------|---|----------------------------------|
| | PSE19153 | Theory of Structural Stability | |
| | PMA19151 | Advanced Mathematical Methods | |
| | PSE19251 | Structural Health Monitoring | |
| | PSE19252 | Smart Structures and Smart Materials | |
| | PSE19253 | Prefabricated Structures | |
| | PSE19254 | Earthquake Resistant Design | |
| | PSE19351 | Advanced Steel Design | |
| | PSE19352 | Design of Formwork | |
| | PSE19353 | Design of High Rise Structures | |
| | PSE19354 | Non Linear Analysis of Structures | |
| | PSE19451 | Design of Advanced concrete Structures | |
| | PSE19452 | Design of Sub Structures | |
| | PSE19453 | Experimental Techniques and Model Analysis | |
| | PSE19454 | Design of Industrial Structures | |
| | PSE16551 | Design of Prefabricated Structures | |
| | PSE16552 | Theory of Plates | |
| | PSE16553 | Design of Shell Structures | |
| | PSE16651 | Design of Industrial Structures | |
| | PSE16652 | Stability of Structures | |
| | PSE16653 | Cracks and Crack Control in Concrete Structures | |
| | PSE16751 | Design of Steel Concrete Composite Structures | |
| | PSE16752 | Mechanics of Composite Materials | |
| | PSE16753 | Design of Power Plant Structures | |
| MASTER OF BUSINESS ADMINISTRATION | BA16G01 | Business Ethics and Corporate Governance | Professional Elective |
| | BA16G02 | Event Management | |
| | BA16G03 | Total Quality Management | |
| | BA16G04 | Entrepreneurship Development | |
| | BA16G05 | Project Management | |
| | BA16G06 | Disaster Management | |
| | BA16M01 | Integrated Marketing Communication | |
| | BA16M02 | Services Marketing | |
| | BA16M03 | Retail Management | |
| | BA16M04 | Customer Relationship Management | |
| | BA16M05 | Social Media Marketing | |
| | BA16M06 | Rural Marketing | |
| | BA16F01 | Security Analysis and Portfolio Management | |
| | BA16F02 | Merchant Banking and Financial Services | |
| | BA16F03 | Corporate Finance | |
| | BA16F04 | Insurance and Risk Management | |
| | BA16F05 | Micro Finance | |
| | BA16F06 | International Trade Finance and Derivative Management | |
| | BA16H01 | Managerial Behavior | |
| | BA16H02 | Training and Development | |
| | BA16H03 | Industrial Relations and Labour Welfare | |
| | BA16H04 | Labour Legislation | |
| | BA16H05 | Strategic Human Resource Management and Development | |
| | BA16H06 | Reward and Compensation Management | |
| | BA16S01 | Enterprise Resource Planning | |

| | | | |
|--|----------|---|----------------------------------|
| | BA16S02 | Advanced Database Management Systems | |
| | BA16S03 | Software Project and Quality Management | |
| | BA16S04 | Knowledge Management System | |
| | BA16S05 | M – Commerce | |
| | BA16S06 | Cloud Computing | |
| | BA16P01 | Supply Chain and Logistics Management | |
| | BA16P02 | Process Management | |
| | BA16P03 | Product Design | |
| | BA16P04 | Service Operations Management | |
| | BA16P05 | Materials Management | |
| | BA16P06 | Maintenance Management | |
| MASTER OF COMPUTER APPLICATIONS | CAE16401 | Financial Accounting | Professional Elective |
| | CAE16402 | Information Security | |
| | CAE16403 | Network Protocols | |
| | CAE16404 | Software Testing and Quality Assurance | |
| | CAE16405 | Game Programming | |
| | CAE16406 | Advanced Data Base | |
| | CAE16501 | Linux Internals | |
| | CAE16502 | High Performance Computing | |
| | CAE16503 | Software Project Management | |
| | CAE16504 | Data Tuning and Administration | |
| | CAE16505 | Soft Computing | |
| | CAE16506 | Ad hoc and Sensor Networks | |
| | CAE16507 | Internet of Things | |
| | CAE16508 | Machine Learning | |
| | CAE16509 | Health Care Analytics | |
| | CAE16510 | Green Computing | |
| | CAE16511 | Human Resource Management | |
| | CAE16512 | Social Network Analysis | |


DEAN - ACADEMICS
Paavai Engineering College
NH-44, Pachal Post, Namakkal Dist.


PRINCIPAL,
PAVAI ENGINEERING COLLEGE
NH-44, PACHAL Post, Namakkal Dist.

1.2.2 - Additional Information - List of One Credit Course Offered

| Name of Programmes adopting one credit course system | Course Code | Course Name | Course Type |
|--|-------------|--|--------------------------|
| B.E -AERONAUTICAL ENGINEERING | AE16951 | Computer Aided Design CATIA | ONE CREDIT COURSE |
| | AE16952 | Computer Aided Design CREO | |
| | AE16953 | Computer Aided Design UNIGRAPHICS | |
| | AE16954 | Computer Aided Design AUTOCAD | |
| | AE16955 | Computer Aided Design SOLID WORKS | |
| | AE16956 | Computer Aided Analysis ANSYS | |
| | AE16957 | Computer Aided Analysis HYPERMESH | |
| | AE16958 | Computer Aided Analysis NASTRAN PATRAN | |
| | AE16959 | Computer Aided Analysis MATLAB | |
| | AE16960 | Computer Aided Analysis FLUENT | |
| | AE16961 | Non Destructive Testing | |
| | AE16962 | NPTEL Certification | |
| | AE16963 | UAV and MAV Certification | |
| | AE16964 | NPTEL Certification Advanced Aircraft Maintenance | |
| B.E - CIVIL ENGINEERING | CE16951 | Building Planning and Vaasthu | ONE CREDIT COURSE |
| | CE16952 | Advanced Surveying using Total Station | |
| | CE16953 | Building Valuation | |
| | CE16954 | Structural Analysis and Design using Staad Pro | |
| | CE16955 | Building Analysis and Design using E-Tabs | |
| | CE16956 | Building Information Modelling using Revit Architecture | |
| | CE16957 | Project Management using Primavera | |
| | CE16958 | Tekla Structures | |
| | CE16959 | Finite Element and Structural Analysis using NISA | |
| B.E - COMPUTER SCIENCE AND ENGINEERING | CS16951 | Amcat (Online Placement Aptitude Certification) | ONE CREDIT COURSE |
| | CS16952 | e-litmus (Online Placement Aptitude Certification) | |
| | CS16953 | Nasscom nac-tech (Online Placement Aptitude Certification) | |
| | CS16954 | I-pat (Online Placement Aptitude Certification) | |
| | CS16955 | NPTEL / Swayam (Online courses)- Software Engineering | |
| | CS16956 | NPTEL- Artificial Intelligence Search Methods for Problem Solving | |
| | CS16957 | NPTEL-Computer Networks and Internet Protocol | |
| | CS16958 | NPTEL-The joy of computing using python | |
| | CS16959 | NPTEL-Programming in C++ | |
| | CS16960 | NPTEL-Programming, data structures and algorithm using python | |
| | CS16961 | NPTEL-Machine Learning | |
| | CS16962 | NPTEL-Introduction to Internet of Things | |
| | CS16963 | Spoken Tutorial -Advanced C++ | |
| | CS16964 | Spoken Tutorial- Java Business Application | |
| | CS16965 | Spoken Tutorial -Linux and Ubuntu | |
| | CS16966 | Spoken Tutorial -BOSS Linux | |
| | CS16967 | Spoken Tutorial -PHP and MySQL | |
| | CS16968 | Oracle -SQL fundamentals | |
| | CS16969 | Oracle -Java Fundamentals | |
| | CS16970 | CCNA -Certification | |
| | CS16971 | SCJP / OCPJP -Sun Certified Java Programmer/ Oracle Certified Professional Java Programmer | |
| | CS16972 | Android application Development | |
| | CS16973 | PC Hardware and Trouble shooting | |
| | CS16974 | NPTEL-Big Data Computing | |
| | CS16975 | NPTEL-Programming in Java | |
| | CS16976 | NPTEL-Cloud Computing | |



DEAN - ACADEMICS
Paavai Engineering College
1-44, Pachal Post, Namakkal Dist.



PRINCIPAL
PAAVAI ENGINEERING COLLEGE
NH-7, PACHAL Post, NAMAKKAL Dist.

| Name of Programmes adopting one credit course system | Course Code | Course Name | Course Type |
|--|-------------|--|--------------------------|
| | CS16977 | NPTEL-Data Mining | |
| | CS16978 | NPTEL-Design and Analysis of Algorithms | |
| | CS16979 | NPTEL-Ethical Hacking | |
| | CS16980 | NPTEL-Practical Machine learning with TensorFlow | |
| | CS16981 | NPTEL-Compiler Design | |
| | CS16982 | NPTEL-Data Science for Engineers | |
| B.E-ELECTRONICS AND COMMUNICATION ENGINEERING | EC16951 | Embedded Programming using ARDUINO | ONE CREDIT COURSE |
| | EC16952 | PC Hardware Assembling and Trouble shooting | |
| | EC16953 | CISCO Certified Network Associate | |
| | EC16954 | Basic Electronic Circuit Design using Multisim | |
| | EC16955 | MATLAB Programming | |
| | EC16956 | Software Defined Radio | |
| B.E- ELECTRICAL AND ELECTRONICS ENGINEERING | EE16951 | Best Maintenance Practices in Low Voltage Switchgear | ONE CREDIT COURSE |
| | EE16952 | Breaker Maintenance Workshop C-Power Air Circuit Breaker | |
| | EE16953 | Electrical Design of Switchgear Assembly | |
| | EE16954 | Power Distribution in Buildings | |
| | EE16955 | Selection and Application of Drives | |
| | EE16956 | Industrial Protection with Numerical Relays | |
| | EE16957 | Creating a Printed Circuit Board | |
| | EE16958 | Supervisory Control and Data Acquisition | |
| | EE16959 | Design of Control Circuits | |
| B.E - MECHANICAL ENGINEERING | ME16951 | Non-Destructive Testing | ONE CREDIT COURSE |
| | ME16952 | CATIA | |
| | ME16953 | CNC Milling | |
| | ME16954 | SOLIDWORKS | |
| | ME16955 | Industrial Robotics | |
| | ME16956 | Industrial Automation | |
| | ME16957 | ANSYS Fluent | |
| | ME16958 | Computer Aided Reverse Engineering | |
| B.E - MECHATRONICS | MT16951 | Maintenance and troubleshooting of hydraulic system | ONE CREDIT COURSE |
| | MT16952 | SCADA certification | |
| | MT16953 | CAD Software - CATIA V5 | |
| | MT16954 | PLC programming Certification | |
| | MT16955 | Control of Motors Using Special Drives | |
| | MT16956 | Robot Programming Certification | |
| | MT16957 | Control Panel and Wiring | |
| B.E. - BIOMEDICAL ENGINEERING | BM16951 | Embedded Programming using ARDUINO | ONE CREDIT COURSE |
| | BM16952 | PC Hardware Assembling and Troubleshooting | |
| | BM16953 | Basic Electronic Circuit Design using Multisim | |
| | BM16954 | MATLAB Programming | |
| | BM16955 | Industrial Medical Systems | |
| | BM16956 | Open source programming using Linux | |
| | BM16957 | PCB Design using Cadence EDA Tool | |
| | BM16958 | Digital System Design using VHDL | |
| B.TECH-CHEMICAL ENGINEERING | CM16951 | Introduction to Fuel Cell Technology | ONE CREDIT COURSE |
| | CM16952 | Insight to Hydrogen as Fuel | |
| | CM16953 | Introduction to Petrochemicals | |
| | CM16954 | Corrosion Engineering | |
| | CM16955 | Nanomaterials for Energy and Environmental | |
| | CM16956 | Outline to Biomaterials | |
| | CM16957 | Analysis for Characterization of Nanomaterials | |


DEAN - ACADEMICS
 Paavai Engineering College
 1-44, Pachal Post, Namakkal Dist.


PRINCIPAL
 PAAVAI ENGINEERING COLLEGE
 NH-7, PACHAL Post, NAMAKKAL Dist.

| Name of Programmes adopting one credit course system | Course Code | Course Name | Course Type |
|--|-------------|--|------------------------------|
| | CM16958 | Pinch technology | |
| | CM16959 | Physical Chemistry Of Polymers | |
| | CM16960 | Polymeric Materials | |
| | CM16961 | Fabrication Of Polymer Materials | |
| | CM16962 | Experiments on Water Analysis | |
| B.TECH-INFORMATION TECHNOLOGY | IT16951 | Amcat (Online Placement Aptitude Certification) | ONE CREDIT COURSE |
| | IT16952 | e-litmus(Online Placement Aptitude Certification) | |
| | IT16953 | Nasscom nas-tech(Online Placement Aptitude Certification) | |
| | IT16954 | I-pat (Online Placement Aptitude Certification) | |
| | IT16955 | NPTEL / Swayam (Online courses) | |
| | IT16956 | Spoken Tutorial -Advanced C++ | |
| | IT16957 | Spoken Tutorial- Java Business Application | |
| | IT16958 | Spoken Tutorial -Linux &Ubuntu | |
| | IT16959 | Spoken Tutorial -BOSS Linux | |
| | IT16960 | Spoken Tutorial -PHP & MySQL | |
| | IT16961 | Oracle – SQL fundamentals | |
| | IT16962 | Oracle – Java Fundamentals | |
| | IT16963 | CCNA – Certification | |
| | IT16964 | SCJP / OCPJP – Sun Certified Java Programmer / Oracle Certified Professional Java Programmer | |
| | IT16965 | Android application Development | |
| | IT16966 | PC Hardware and Trouble shooting | |
| | IT16967 | Linux System Administration | |
| | IT16968 | Cyber Security | |



DEAN - ACADEMICS
Paavai Engineering College
4-44, Pachal Post, Namakkal Dist.



PRINCIPAL
PAAVAI ENGINEERING COLLEGE
NH-7, PACHAL Post, NAMAKKAL Dist.