



JAIDEV EDUCATION SOCIETY'S
J D COLLEGE OF ENGINEERING AND MANAGEMENT
KATOL ROAD, NAGPUR

Website: www.jdcoem.ac.in E-mail: info@jdcoem.ac.in
An Autonomous Institute, with NAAC "A" Grade
Affiliated to DBATU, RTMNU & MSBTE, Mumbai
Department of Civil Engineering
"Building Better Development"
Session 2021-22



1.1.1

| B.Tech. Electrical Engineering | | |
|--------------------------------|---|--------------------------------|
| Program Specific Outcomes | | |
| PSO | Statement | Relevance to Development Need |
| PSO1 | Represent and relate the basic engineering knowledge with proficiency in competent problem-solving ability through analysis, investigation and design of diverse area of civil engineering. | Local, Regional, National |
| PSO2 | Inculcate the professionalism in communication with application of modern civil engineering tools along with ethical and societal responsibilities to have a successful career. | Local, Regional, National |
| PSO3 | Assemble the concept of civil engineering for higher education, research or entrepreneurship and also evaluates the information for maintaining the specifications in quality work. | Local,Regional.National,Global |

| Course Category | Sample Relevant Courses |
|---------------------------------|---|
| Relevance to the Local Needs | Innovation and Entrepreneurship Development, Life Science, Consumer Affairs |
| Relevance to the Regional Needs | Energy Science and Engineering, Mini Project & Seminar, Project-2, Internship, Hydrology & Water Resource Engineering |
| Relevance to the National Needs | Mechanics of Rigid bodies, Building Drawing and Drafting, Concrete Technology & Design of RCC Building Elements, Professional Practice, Law & Ethics, Engineering Economics, Estimating and Costing |
| Relevance to the Global Needs | Universal Human Values, Engineering Mathematics-ii, Civil Engineering - Societal & Global Impact, Campus Recruitment Training (CRT), Skill Development, Research Methodology, Solid Mechanics |

Principal
J D College of Engineering & Management
Khandala, Katol Road
Nagpur-441501



HoD/B.O.S Chairman

H.O.D.

Department of Civil Engineering
J.D.C O.E.M., Nagpur



Education to Eternity

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॥ ज्ञानम् सर्वार्थ साधनम् ॥

VISION

To be a well-known center for shaping professional leaders of Global Standards in Civil Engineering

MISSION

Provide quality education and excellent learning Environment for overall development of students.
Making Sustainable efforts for integrating academics with Industry.

Teaching Scheme

Branch: Civil Engineering

Branch Code: CE

| III Semester | | | | | | | | | | | |
|--------------|---------------------|-------------|--|-----------------|---|---|-------------------|-----|---------------|-------|--------|
| Sr. No. | Category of Subject | Course Code | Course Name | Teaching Scheme | | | Evaluation Scheme | | | | Credit |
| | | | | L | T | P | CA | MSE | ESE/Ext. Pra. | Total | |
| 1 | HSMC | CE3T001 | Civil Engineering - Societal & Global Impact | 2 | 0 | 0 | 20 | 20 | 60 | 100 | 2 |
| 2 | BSC | CE3T002 | Engineering Mathematics-III | 2 | 1 | 0 | 20 | 20 | 60 | 100 | 3 |
| 3 | ESC | CE3T003 | Building Drawing and Drafting | 2 | 1 | 0 | 20 | 20 | 60 | 100 | 3 |
| 4 | ESC | CE3T004 | Mechanics of Rigid Bodies | 2 | 1 | 0 | 20 | 20 | 60 | 100 | 3 |
| 5 | ESC | CE3T005 | Energy Science and Engineering | 3 | 0 | 0 | 20 | 20 | 60 | 100 | 3 |
| 6 | PCC | CE3T006 | Basic Geology and Geotechnical Engineering | 3 | 0 | 0 | 20 | 20 | 60 | 100 | 3 |
| 7 | MC | CE3T007 | Universal Human Values | 3 | 0 | 0 | 20 | 20 | 60 | 100 | 3 |
| 8 | ESC | CE3L001 | Building Drawing and Drafting Lab | 0 | 0 | 4 | 60 | 0 | 40 | 100 | 2 |
| 9 | ESC | CE3L002 | Mechanics of Rigid Bodies Lab | 0 | 0 | 2 | 60 | 0 | 40 | 100 | 1 |
| 10 | PCC | CE3L003 | Basic Geology and Geotechnical Engineering Lab | 0 | 0 | 2 | 60 | 0 | 40 | 100 | 1 |
| 11 | PROJECT | CE3F004 | Field Visit I | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 1 |
| | | | | 17 | 3 | 8 | | | | | 25 |




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| IV Semester | | | | | | | | | | | |
|-------------|---------------------|-------------|---|-----------------|----------|----------|-------------------|-----|---------------|-------|-----------|
| Sr. No. | Category of Subject | Course Code | Course Name | Teaching Scheme | | | Evaluation Scheme | | | | Credit |
| | | | | L | T | P | CA | MSE | ESE/Ext. Pra. | Total | |
| 1 | BSC | CE4T001 | Life Science | 2 | 0 | 0 | 20 | 20 | 60 | 100 | 2 |
| 2 | PCC | CE4T002 | Hydrology & Water Resource Engineering | 2 | 1 | 0 | 20 | 20 | 60 | 100 | 3 |
| 3 | PCC | CE4T003 | Concrete Technology & Design of RCC Building Elements | 2 | 1 | 0 | 20 | 20 | 60 | 100 | 3 |
| 4 | PCC | CE4T004 | Solid Mechanics | 2 | 1 | 0 | 20 | 20 | 60 | 100 | 3 |
| 5 | PCC | CE4T005 | Surveying and Geomatics | 2 | 0 | 0 | 20 | 20 | 60 | 100 | 2 |
| 6 | PCC | CE4T006 | Materials, Testing & Evaluation | 2 | 0 | 0 | 20 | 20 | 60 | 100 | 2 |
| 7 | PCC | CE4L001 | Concrete Technology & Design of RCC Building Elements Lab | 0 | 0 | 2 | 60 | 0 | 40 | 100 | 1 |
| 8 | PCC | CE4L002 | Solid Mechanics Lab | 0 | 0 | 2 | 60 | 0 | 40 | 100 | 1 |
| 9 | PCC | CE4L003 | Surveying and Geomatics Lab | 0 | 0 | 4 | 60 | 0 | 40 | 100 | 2 |
| 10 | PROJECT | CE4F004 | Field Visit II | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 1 |
| 11 | MC | CE4T007 | Innovation and Entrepreneurship Development | 2 | 0 | 0 | 10 | 15 | 25 | 50 | AU |
| | | | | 14 | 3 | 8 | | | | | 20 |




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| V Semester | | | | | | | | | | | |
|------------|---------------------|-------------|-------------------------------------|-----------------|---|---|-------------------|-----|---------------|-------|--------|
| Sr. No. | Category of Subject | Course Code | Course Name | Teaching Scheme | | | Evaluation Scheme | | | | Credit |
| | | | | L | T | P | CA | MSE | ESE/Ext. Pra. | Total | |
| 1 | HSMC | CE5T001 | Professional Practice, Law & Ethics | 2 | 0 | 0 | 20 | 20 | 60 | 100 | 2 |
| 2 | PCC | CE5T002 | Fluid Mechanics | 2 | 1 | 0 | 20 | 20 | 60 | 100 | 3 |
| 3 | PCC | CE5T003 | Structural Analysis | 2 | 1 | 0 | 20 | 20 | 60 | 100 | 3 |
| 4 | PCC | CE5T004 | Transportation Engineering | 3 | 0 | 0 | 20 | 20 | 60 | 100 | 3 |
| 5 | OEC | CEOEC1 | Open Elective-I | 4 | 0 | 0 | 20 | 20 | 60 | 100 | 4 |
| 6 | PCC | CE5L001 | Fluid Mechanics Lab | 0 | 0 | 2 | 60 | 0 | 40 | 100 | 1 |
| 7 | PCC | CE5L002 | Structural Analysis Lab | 0 | 0 | 2 | 60 | 0 | 40 | 100 | 1 |
| 8 | PCC | CE5L003 | Transportation Engineering Lab | 0 | 0 | 2 | 60 | 0 | 40 | 100 | 1 |
| 9 | PROJECT | CE5P004 | Mini Project & Seminar | 0 | 0 | 2 | 60 | 0 | 40 | 100 | 1 |
| 10 | PROJECT | CE5F005 | Field Visit III | 0 | 0 | 0 | 60 | 0 | 40 | 100 | 1 |
| 11 | MC | CE5T005 | Consumer Affair | 2 | 0 | 0 | 10 | 15 | 25 | 50 | AU |
| | | | | 15 | 2 | 8 | | | | | 20 |




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| VI Semester | | | | | | | | | | | |
|-------------|---------------------|-------------|-----------------------------------|-----------------|---|----|-------------------|-----|---------------|-------|--------|
| Sr. No. | Category of Subject | Course Code | Course Name | Teaching Scheme | | | Evaluation Scheme | | | | Credit |
| | | | | L | T | P | CA | MSE | ESE/Ext. Pra. | Total | |
| 1 | PCC | CE6T001 | Design of Steel Structures | 2 | 1 | 0 | 20 | 20 | 60 | 100 | 3 |
| 2 | PCC | CE6T002 | Environmental Engineering | 3 | 0 | 0 | 20 | 20 | 60 | 100 | 3 |
| 3 | PEC | CE5TE01 | Professional Elective I | 3 | 0 | 0 | 20 | 20 | 60 | 100 | 3 |
| 4 | PEC | CE6TE02 | Professional Elective-II | 3 | 0 | 0 | 20 | 20 | 60 | 100 | 3 |
| 5 | OEC | CEOEC2 | Open Elective-II | 4 | 0 | 0 | 20 | 20 | 60 | 100 | 4 |
| 6 | PCC | CE6L001 | Design of Steel Structures Lab | 0 | 0 | 2 | 60 | 0 | 40 | 100 | 1 |
| 7 | PCC | CE6L002 | Environmental Engineering Lab | 0 | 0 | 2 | 60 | 0 | 40 | 100 | 1 |
| 8 | PROJECT | CE6P003 | Mini Project & Seminar | 0 | 0 | 2 | 30 | 0 | 20 | 50 | 1 |
| 9 | | CE6P004 | Campus Recruitment Training (CRT) | 0 | 0 | 2 | 50 | 0 | 0 | 50 | 1 |
| 10 | | CE6P005 | Skill Development | 0 | 0 | 2 | 15 | 0 | 35 | 50 | 1 |
| 11 | MC | CE6T004 | Research Methodology | 2 | 0 | 0 | 10 | 15 | 25 | 50 | AU |
| | | | | 17 | 1 | 10 | | | | | 21 |




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B. Tech. Civil Engineering

Course Structure for Semester VII (Fourth Year) w.e.f. 2020-2021

| Course Code | Type of Course | Course Title | Weekly Teaching Scheme | | | Evaluation Scheme | | | | Credits |
|--------------|-----------------|---|------------------------|----------|-----------|-------------------|------------|------------|------------|----------------|
| | | | L | T | P | CA | MSE | ESE | Total | |
| BTCVC701 | Core | Design of Concrete Structures - II | 2 | 1 | -- | 20 | 20 | 60 | 100 | 3 |
| BTCVC702 | Core | Infrastructure Engineering | 3 | -- | -- | 20 | 20 | 60 | 100 | 3 |
| BTCVC703 | Core | Water Resources Engineering | 3 | 1 | -- | 20 | 20 | 60 | 100 | 4 |
| BTCVC704 | Core | Professional Practices | 2 | 1 | -- | 20 | 20 | 60 | 100 | 3 |
| BTCVE705A | Elective IV | Construction Techniques | 3 | -- | -- | 20 | 20 | 60 | 100 | 3 |
| BTCVE705B | | Engineering Economics | | | | | | | | |
| BTCVE705C | | Finite Element Method | | | | | | | | |
| BTCVE705D | | Limit State Design of Steel Structures | | | | | | | | |
| BTCVE705E | | Plastic Analysis and Design | | | | | | | | |
| BTCVE705F | | Water Power Engineering | | | | | | | | |
| BTCVOE706A | Open Elective V | Advanced Structural Mechanics | 3 | -- | -- | -- | -- | -- | -- | Audit (AU/ NP) |
| BTCVOE706B | | Air Pollution Control | | | | | | | | |
| BTCVOE706C | | Bridge Engineering | | | | | | | | |
| BTCVOE706D | | Introduction to Earthquake Engineering | | | | | | | | |
| BTCVOE706E | | Town and Urban Planning | | | | | | | | |
| BTCVOE706F | | Tunneling and Underground Excavations | | | | | | | | |
| BTCVL707 | Laboratory | Design & Drawing of RC & Steel Structures | -- | -- | 2 | 30 | -- | 20 | 50 | 1 |
| BTCVL708 | Laboratory | Professional Practices | -- | -- | 2 | 30 | -- | 20 | 50 | 1 |
| BTCVT709 | Training | Field Training /Internship/Industrial | -- | -- | -- | -- | -- | 50 | 50 | 1 |
| BTCVS710 | BTS | Seminar | -- | -- | 2 | -- | -- | 50 | 50 | 1 |
| BTCVP711 | BTP | Project Stage-I** | -- | -- | 6 | -- | 50 | 50 | 100 | 3 |
| Total | | | 16 | 3 | 12 | 160 | 150 | 490 | 800 | 23 |

**In case of students opting for Internship and Industry Project in the eighth semester, the Project must be industry-based.




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B. Tech. Civil Engineering
Course Structure for Semester VIII [Fourth Year] w.e.f. 2020-2021

| Course Code | Type of Course | Course Title | Weekly Teaching Scheme | | | Evaluation Scheme ^s | | | | Credits |
|-------------|----------------------------------|---|------------------------|----|----|--------------------------------|-----|-----|-------|---------|
| | | | L | T | P | CA | MSE | ESE | Total | |
| BTCVSS801A | (Self-Study Course) [#] | Characterization of Construction Materials | 03** | -- | -- | 20 | 20 | 60 | 100 | 3 |
| BTCVSS801B | | Geosynthetics and Reinforced Soil Structures | | | | | | | | |
| BTCVSS801C | | Higher Surveying | | | | | | | | |
| BTCVSS801D | | Maintenance and Repair of Concrete Structures | | | | | | | | |
| BTCESS801E | | Structural Dynamics | | | | | | | | |
| BTCESS802A | (Self-Study Course) [#] | Energy Efficiency Acoustics and Daylighting in Building | 03** | -- | -- | 20 | 20 | 60 | 100 | 3 |
| BTCESS802B | | Environmental Remediation of Contaminated Sites | | | | | | | | |
| BTCESS802C | | Remote Sensing Essentials | | | | | | | | |
| BTCESS802D | | Mechanical Characterization of Bituminous Materials | | | | | | | | |
| BTCESS802E | | Soil Structure Interaction | | | | | | | | |
| BTCEP803 | Project Stage-II | In-house Project or Internship and Project in Industry* | -- | -- | 30 | 50 | -- | 100 | 150 | 15 |
| Total | | | 04 | -- | 30 | 90 | 40 | 220 | 350 | 21 |

[#] The subjects are to be studied on self-study mode using SWAYAM/NPTEL/any other online source approved by the University.

^{**} If required Coordinator may be appointed for each Self study course and an administrative load of 03 hours per week may be considered for monitoring and assisting the students, and to conduct examination (if required), evaluation and preparation of result.

^s If the examination schedule for the online Self study course chosen by student do not match with the University's Academic Schedule, the University/Institute have to conduct exam for such courses.

* Six months of Internship and Project in the Industry. One Faculty guide from the Institute and one Mentor from the Industry should be identified to monitor the progress of work. During the Project/Internship period of work, a review of work should be taken twice followed by a final presentation at the end of Project period.




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 Department of Electrical Engineering
 "Igniting minds to illuminate the world"

AY-2021-22



| VISION | MISSION |
|---|---|
| <p>"To develop competent and committed Electrical Engineers to serve the society"</p> | <ol style="list-style-type: none"> To impart quality education in the field of Electrical Engineering. To be excellent learning center through research and industry interaction. |

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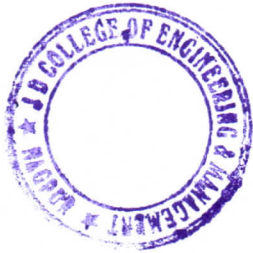
| B. Tech. Electrical Engineering | | |
|--|--|---|
| Program Specific Outcomes | | |
| PSO | Statement | Relevance to Development Need (Select Suitable) |
| PSO1 | Interpret, identify and analyze problems in electrical domain and demonstrate this knowledge to develop, control and assess electrical systems. | Local,Regional |
| PSO2 | Solve ethically and professionally various Electrical Engineering problems in societal and environmental context and communicate effectively. | Local,Regional.National |
| PSO3 | Apply modern software tools for design, simulation and analysis of electrical systems to engage in life-long learning and to successfully adapt in multi disciplinary environments | Local,Regional.National,Global |

| Course Category | Sample Relevant Courses |
|---------------------------------|---|
| Relevance to the Local Needs | Consumer Affairs, Engineering Economics, Electrical Machine I, Universal Human Values |
| Relevance to the Regional Needs | Engineering Economics, Electrical Machine I, Innovation and entrepreneurship Development, Consumer Affairs, Power Systems, Power Station Practice, Entrepreneurship essentials. |
| Relevance to the National Needs | Engineering Economics, Electrical Machine I, Power station Practice, Innovation and entrepreneurship Development, Intellectual Property Rights, Consumer Affairs, Power Systems, Entrepreneurship essentials. |

| | |
|-------------------------------|--|
| Relevance to the Global Needs | Universal Human Values –II, Electrical Machine I, Control System I , Power Systems |
|-------------------------------|--|



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HoD(EE)
HOD
Dept. of Electrical Engineering
J.D. College of Engineering
& Management, Nagpur



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॥ ज्ञानम् सर्वत्र साधनम् ॥

Department of CSE

"A Place to Learn ; A Chance to Grow"

Session 2021-22

| VISION | MISSION |
|--|--|
| To be a recognized as an Excellent Innovative Engineering Department through Academic Programme which develops leaders in Education and Research in Computer Science." | <ol style="list-style-type: none"> To create self-learning environment by facilitating leadership qualities, team-spirit and ethical responsibilities. To Strengthen department-industry collaboration and interaction with professional society through technical knowledge and internship program. To promote research and development with current techniques through well qualified resources in the area of computer science and wireless engineering. |

PSO Relevance to Development Need (B.Tech)

| PSO | Statement | Relevance to Development Need |
|------|---|--------------------------------------|
| PSO1 | The ability to understand, analyse and develop computer programs in the areas related to algorithms, system software, multimedia, web design, big data analytics, and networking for efficient design of computer-based systems of varying complexity | Local/ Regional/ National/ Global |
| PSO2 | The ability to apply standard practices and strategies in software project development using open-ended programming environments to deliver a quality product for business success. | Local/ Regional/ National/ Global |
| PSO3 | The ability of employ modern computer languages, environments, and platforms in creating innovative career paths to be an entrepreneur, lifelong learning & a zest for higher studies and also acts as good citizen by inculcating in them moral values & ethics. | Local/ Regional/ National/ Global |

| Course Category | Sample Relevant Courses |
|---------------------------------|--|
| Relevance to the Local Needs | Innovation and Entrepreneurship Development ,CRT(Campus Recruitment Training), Skill Development, Intellectual Property Rights, Computer Network, Field Training/ Industrial Visit. |
| Relevance to the Regional Needs | Digital Electronics and Microprocessor, , Internet of Things., Computer Network |
| Relevance to the National Needs | Organization Behaviour, Universal Human Values, Consumer Affairs, Ethics in IT, CRT(Campus Recruitment Training), Skill Development, Intellectual Property Rights, Innovation and Entrepreneurship Development |
| Relevance to the Global Needs | Programming for Problem Solving, Digital Electronics and Microprocessor, Data structure & Algorithms, Operating System, Computer Architecture Organization, Software Engineering. Java Programming, FLAT, Computer Network, Database Management Systems, Discrete Mathematics & Graph Structures, TCP/IP. Internet of Things, TCP/IP, Design and Analysis of Algorithm, OSOS (Open Source Operating System), Augmented Reality (Elective 1), Block Chain (Elective 1), Artificial Intelligence & Robotics, Neural Networks and Machine Learning, Cloud Computing, Human Computing, Digital Forensic, Augmented Reality |





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Department of CSE

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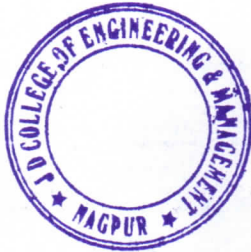
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| | |
|--|---|
| | Block Chain,3D Printing & Design, Deep Learning, Software Engineering, Data Science, Big Data Analytic Technique, Digital Image Processing, Natural Language Processing, AI In Wireless Communication, Research Methodology, Full Stack Development, Advanced Database System, Ethical Hacking, Innovation and Entrepreneurship Development |
|--|---|

HOD, CSE, JDCOEM

HOD
Computer Science & Engineering
JDCOEM, Nagpur



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Department of Information Technology
"Progress Beyond Excellence"**

2021-22



॥ अन्नं सर्वार्थं मातृभूम् ॥

PSO Relevance to Development Need (B.Tech)

| PSO | Statement | Relevance to Development Need |
|------|---|--------------------------------------|
| PSO1 | The ability to understand, analyse and develop computer programs in the areas related to algorithms, system software, multimedia, web design, big data analytics, and networking for efficient design of computer-based systems of varying complexity | Local/ Regional/ National/ Global |
| PSO2 | The ability to apply standard practices and strategies in software project development using open-ended programming environments to deliver a quality product for business success. | Local/ Regional/ National/ Global |
| PSO3 | The ability of employ modern computer languages, environments, and platforms in creating innovative career paths to be an entrepreneur, lifelong learning & a zest for higher studies and also acts as good citizen by inculcating in them moral values & ethics. | Local/ Regional/ National/ Global |

| Course Category | Sample Relevant Courses |
|---------------------------------|---|
| Relevance to the Local Needs | Innovation and Entrepreneurship Development ,CRT(Campus Recruitment Training), Skill Development, Intellectual Property Rights, Computer Network, Field Training/ Industrial Visit. |
| Relevance to the Regional Needs | Digital Electronics and Microprocessor, , Internet of Things., Computer Network |
| Relevance to the National Needs | Organization Behaviour, Universal Human Values, Consumer Affairs, Ethics in IT, CRT(Campus Recruitment Training), Skill Development, Intellectual Property Rights, Innovation and Entrepreneurship Development |
| Relevance to the Global Needs | Programming for Problem Solving, Digital Electronics and Microprocessor, Data structure & Algorithms, Operating System, Computer Architecture Organization, Software Engineering. Java Programming, FLAT, Computer Network, Database Management Systems, Discrete Mathematics & Graph Structures, TCP/IP. Internet of Things, TCP/IP, Design and Analysis of Algorithm, OSOS (Open Source Operating System), Augmented Reality (Elective 1), Block Chain (Elective 1), Artificial Intelligence & Robotics, Neural Networks and Machine Learning, Cloud Computing, Human Computing, Digital Forensic, Augmented Reality Block Chain,3D Printing & Design, Deep Learning, Software Engineering, Data Science, Big Data Analytic Technique, Digital Image Processing, Natural Language Processing, AI In Wireless Communication, Research Methodology, Full Stack Development, Advanced Database System, Ethical Hacking, Innovation and Entrepreneurship Development |

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HOD
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JD COEM, Nagpur





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Department of AI
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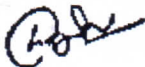
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PSO Relevance to Development Need

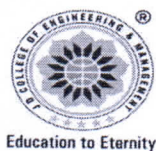
| PSO | Statement | Relevance to Development Need (Select Suitable) |
|------|--|---|
| PSO1 | Understand the basic engineering principles and achieve the hardware and software aspects of computer engineering. | Local/ Regional/ National/ Global |
| PSO2 | Analyse the real world applications using algorithmic models and acquire the knowledge of computer architecture. | Local/ Regional/ National/ Global |
| PSO3 | Ability to design and develop applications using various software tools. | Local/ Regional/ National/ Global |

| Course Category | Sample Relevant Courses |
|---------------------------------|--|
| Relevance to the Local Needs | Operating System & Virtualization, AI in Business Intelligence |
| Relevance to the Regional Needs | Internet of Things, Statistical Data Analysis, AI in Business Intelligence, AI & Cognitive Robotics, AI In satellite and Radar System, |
| Relevance to the National Needs | Organization Behaviour, Universal Human Values, Consumer Affairs, Ethics in IT, CRT(Campus Recruitment Training), Skill Development, Intellectual Property Rights, Innovation and Entrepreneurship Development |
| Relevance to the Global Needs | Mathematics-III, Statistical Data Analysis, Computer Architecture and Organisation, Internet of Things, Data Structure & Algorithms, Theory of Computation, Design & Analysis of Algorithm, Operating System & Virtualization, Neural Networks & Fuzzy System, Discrete Mathematics & Graph Structures, Database Management Systems, AI & Cognitive Robotics, Digital Image Techniques and Analysis, Machine Learning & Deep Learning, AI in Business Intelligence, Innovation and Entrepreneurship Development, Advanced Computer Vision, Data Science, MI with Big Data - Tools & Techniques, Machine Learning with Large data Sets, AI In satellite and Radar System, Object Oriented Methodology |


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HOD, AI, JDCEM
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|--|---|
| To be a recognized as an Excellent Innovative Engineering Department through Academic Programme which develops leaders in Education and Research in Computer Science." | <ol style="list-style-type: none">1. To create self-learning environment by facilitating leadership qualities, team-spirit and ethical responsibilities.2. To Strengthen department-industry collaboration and interaction with professional society through technical knowledge and internship program.3. To promote research and development with current techniques through well qualified resources in the area of computer science and wireless engineering. |

PSO Relevance to Development Need (M.Tech)

| PSO | Statement | Relevance to Development Need (Select Suitable) |
|------|--|---|
| PSO1 | Understand the basic engineering principles and achieve the hardware and software aspects of computer engineering. | Local/ Regional/ National/ Global |
| PSO2 | Analyze the real world applications using algorithmic models and acquire the knowledge of computer architecture. | Local/ Regional/ National/ Global |
| PSO3 | Ability to design and develop applications using various software tools. | Local/ Regional/ National/ Global |

| Course Category | Sample Relevant Courses |
|---------------------------------|--|
| Relevance to the Local Needs | Computer Algorithm, Communication Skills, Object Oriented Systems. |
| Relevance to the Regional Needs | Communication Skills, Intrusion Detection System, High Performance Computing, Reinforcement Learning, Software Testing. |
| Relevance to the National Needs | Game Theory, Social Network Analysis, Communication Skills, Advanced Computer Networks, Software Architecture, Functional Programming, Pattern Recognition. |
| Relevance to the Global Needs | Computer Algorithm, Advanced Operating System, Advanced computer Network, Mobile Communication and Computing, Game Theory, Social Network Analysis, Intrusion Detection System, Artificial Intelligent and knowledge Reasoning, High Performance Computing, Communication Skills, Software Architecture, Algorithm for Big Data, Real Time System, Cryptography and Network Security, Machine Learning, Communication Skill, Software Lab I, Data Science, Project Management and Intellectual Property Rights, Virtual Reality, Introduction to Cognitive Sciences. |

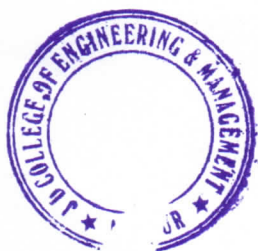
Principal

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Nagpur-441501

HOD, CSE, JDCOEM

HOD

Computer Science & Engineering
JDCOEM, Nagpur





**JAIDEV EDUCATION SOCIETY'S
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**An Autonomous Institute, with NAAC "A" Grade
Department of Mechanical Engineering
Session : 2021-22**

VISION

MISSION

"To be a center of excellence for learning and research in mechanical Engineering."

1. To provide high quality, innovative and research environment in Mechanical Engineering.
2. Accomplish expectation of industry and society by nurturing the student to be competent professional with overall personal development.

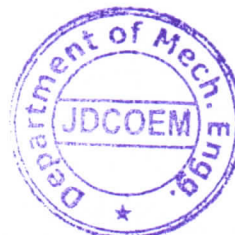
B. Tech. Mechanical Engineering

Program Specific Outcomes

| PSO | Statement | Relevance to Development Need (Select Suitable) |
|------|---|---|
| PSO1 | Graduates should excel in engineering positions in industry and other organizations that emphasize design and implementation of engineering systems and devices | Global |
| PSO2 | Alumni should establish a successful career in an engineering-related field and adapt to changing technologies. | National / Global |
| PSO3 | Graduates should be good citizens and cultured human beings, with full appreciation of the importance of professional, ethical and societal responsibilities. | Global |

| Course Category | Sample Relevant Courses |
|---------------------------------|---|
| Relevance to the Local Needs | Communication Skills, Introduction to Computer programming, Industrial visit, Innovation and Entrepreneurship Development, Campus Recruitment Training, Research Methodology, |
| Relevance to the Regional Needs | Basic Electrical and Electronics Engineering, Product Design and Development, Consumer Affair, Skill Development, Intellectual property rights |
| Relevance to the National Needs | Basic Civil and Mechanical Engineering, Universal Human Value, Numerical Method, Basic Electronic Engineering, |
| Relevance to the Global Needs | Engineering Mathematics- I, Engineering Chemistry, Engineering Graphics, Engineering Mathematics- II, Engineering Physics, Energy and Environment Engineering, Applied Maths-III, Material Science, Engineering Thermodynamics, Theory Of Machines-I, Manufacturing Engineering-I, Manufacturing Engineering-II, Strength Of Materials, Fluid Mechanics & Fluid Machines, Heat Transfer, Theory Of Machines-II, Measurement and Quality Control, Operation Research, Applied Thermodynamics, Design of Machine Element, |

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Head of Department