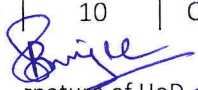


| NEW      | ECE        | B.TECH IN ECE                                     | 2022-23                   |                                |
|----------|------------|---|---------------------------|--------------------------------|
| Semester | Paper Code | Name of Elective Course                           | Cours<br>e<br>offere<br>d | No of<br>Stude<br>nts<br>opted |
| 5TH      | PE-EC 505A | Nano Electronics                                  | YES                       | 105                            |
|          | PE-EC 505B | Speech and Audio Processing                       | NO                        | 0                              |
|          | PE-EC 505C | Power Electronics                                 | NO                        | 0                              |
|          | PE-EC 505D | Scientific Computing                              | NO                        | 0                              |
|          | OE-EC506A  | Soft Skill and Interpersonal Communication        | YES                       | 105                            |
|          | OE-EC506B  | Cyber Law & Intellectual Property V Rights        | NO                        | 0                              |
|          | OE-EC506C  | Human Resource Management                         | NO                        | 0                              |
| 6TH      | PE-EC603A  | Introduction to MEMS                              | NO                        | 0                              |
|          | PE-EC603B  | Bio-Medical Electronics                           | NO                        | 0                              |
|          | PE-EC603C  | CMOS VLSI Design                                  | YES                       | 35                             |
|          | PE-EC603D  | Information Theory and Coding                     | YES                       | 69                             |
|          | OE-EC604A  | Electronic Measurements and Measuring Instruments | YES                       | 104                            |
|          | OE-EC604B  | Operating System                                  | NO                        | 0                              |
|          | OE-EC604C  | Object Oriented Programming                       | NO                        | 0                              |
| 7TH      | PE-EC701A  | Microwave Theory and Techniques                   | NO                        | 0                              |
|          | PE-EC701B  | Satellite Communication                           | NO                        | 0                              |
|          | PE-EC701C  | Mobile Communication and Networks                 | YES                       | 137                            |
|          | PE-EC702A  | Adaptive Signal Processing                        | NO                        | 0                              |
|          | PE-EC702B  | Digital Image and Video Processing                | YES                       | 137                            |
|          | PE-EC702C  | Neural Network and Fuzzy Logic Control            | NO                        | 0                              |
|          | PE-EC703A  | Embedded System                                   | YES                       | 137                            |
|          | PE-EC703B  | Wireless Sensor Networks                          | NO                        | 0                              |
|          | PE-EC703C  | Wavelet Transforms                                | NO                        | 0                              |
|          | OE-EC704A  | Web Technology                                    | YES                       | 137                            |
|          | OE-EC704B  | Optimisation Technique                            | NO                        | 0                              |
|          | OE-EC704C  | Entrepreneurship                                  | NO                        | 0                              |
| 8TH SEM  | PE-EC801A  | Antennas and Propagation                          | NO                        | 0                              |
|          | PE-EC801B  | Fibre Optic Communication                         | YES                       | 137                            |
|          | PE-EC801C  | Error Correcting Codes                            | NO                        | 0                              |
|          | PE-EC802A  | Mixed Signal Design                               | NO                        | 0                              |
|          | PE-EC802B  | Industrial Automation and Control                 | YES                       | 137                            |
|          | PE-EC802C  | VLSI Design Automation                            | NO                        | 0                              |
|          | OE-EC803A  | Internet of Things(IoT)                           | NO                        | 0                              |
|          | OE-EC803B  | Big Data Analysis                                 | YES                       | 137                            |
|          | OE-EC803C  | Cyber Security                                    | NO                        | 0                              |
|          | OE-EC804A  | Artificial Intelligence                           | NO                        | 0                              |
|          | OE-EC804B  | Microwave Integrated Circuits                     | YES                       | 137                            |
|          | OE-EC804C  | Organisational Behaviour                          | NO                        | 0                              |

  
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|--|--------------|--------------------------------|----------------------------|---|
| DEPARTMENT: IT                             |              |                                |                            |   |
| B.TECH 5TH SEMESTER (AY 2022-23)           |              |                                |                            |   |
| NEW SYLLABUS                               |              |                                |                            |   |
| SRL NO.                                    | PAPER CODE   | PAPER NAME                     | Course Offered<br>(Yes/No) | NO. OF STUDENTS<br>ENROLLED IN &<br>COMPLETED THE<br>COURSE |
| 1  | PEC-IT 501 A | Theory of Computation          | NO                         | 0   |
| 2  | PEC-IT 501 B | Artificial intelligence        | YES                        | 68  |
| 3  | PEC-IT 501 C | Advanced Computer Architecture | NO                         | 0   |
| 4  | PEC-IT 501 D | Computer Graphics              | NO                         | 0   |

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| DEPARTMENT: IT                             |              |                                     |                            |   |
| B.TECH 6TH SEMESTER (AY 2022-23)           |              |                                     |                            |   |
| NEW SYLLABUS                               |              |                                     |                            |   |
| SRL NO.                                    | PAPER CODE   | PAPER NAME                          | Course Offered<br>(Yes/No) | NO. OF STUDENTS<br>ENROLLED IN &<br>COMPLETED THE<br>COURSE |
| 1  | PEC-IT 601 A | Advanced algorithm                  | NO                         | 0   |
| 2  | PEC-IT 601 B | Distributed systems                 | YES                        | 68  |
| 3  | PEC-IT 601 C | Signals & Systems                   | NO                         | 0   |
| 4  | PEC-IT 601 D | Image processing                    | NO                         | 0   |
| 5  | PEC-IT 602 A | Parallel and distributed algorithms | NO                         | 0   |
| 6  | PEC-IT 602 B | Data Warehousing & data mining      | YES                        | 68  |
| 7  | PEC-IT 602 C | Human computer interaction          | NO                         | 0   |
| 8  | PEC-IT 601 D | Pattern Recognition                 | NO                         | 0   |
| 9  | OEC-IT 601 A | Numerical methods                   | NO                         | 0   |
| 10   | OEC-IT 601 B | Human computer interaction          | YES                        | 68  |

  
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 31-07-2023



**DR. B.C. ROY ENGINEERING COLLEGE, DURGAPUR**

**DEPARTMENT: IT, B.TECH 7TH SEMESTER (AY 2022-23)**

**NEW SYLLABUS**

| SRL NO. | PAPER CODE   | PAPER NAME                               | Course Offered<br>(Yes/No) | NO. OF STUDENTS<br>ENROLLED IN &<br>COMPLETED THE<br>COURSE |
|---------|--------------|--|----------------------------|---|
| 1       | PEC-IT 701 A | Internet Technology                      | NO                         | 0   |
| 2       | PEC-IT 701 B | Quantum Computing                        | NO                         | 0   |
| 3       | PEC-IT 701 C | Cloud Computing                          | YES                        | 61  |
| 4       | PEC-IT 701 D | Machine Learning                         | NO                         | 0   |
| 5       | PEC-IT 702 A | Multimedia Technology                    | NO                         | 0   |
| 6       | PEC-IT 702 B | Neural Networks and Deep Learning        | NO                         | 0   |
| 7       | PEC-IT 702 C | Softcomputing                            | NO                         | 0   |
| 8       | PEC-IT 702 D | Ad- Hoc and Sensor Networks              | NO                         | 0   |
| 9       | PEC-IT 702 E | Information Theory and Coding            | NO                         | 0   |
| 10      | PEC-IT 702 F | Cyber Security                           | YES                        | 61  |
| 11      | OEC-IT 701 A | Operation Research                       | YES                        | 61  |
| 12      | OEC-IT 701 B | Introduction to Philosophical Thoughts   | NO                         | 0   |
| 13      | OEC-IT 701 C | Soft skill & Interpersonal communication | NO                         | 0   |

**DR. B.C. ROY ENGINEERING COLLEGE, DURGAPUR**

**DEPARTMENT: IT**

**B.TECH 8TH SEMESTER (AY 2022-23)**

**NEW SYLLABUS**

| SRL NO. | PAPER CODE     | PAPER NAME                             | Course Offered<br>(Yes/No) | NO. OF STUDENTS<br>ENROLLED IN &<br>COMPLETED THE<br>COURSE |
|---------|----------------|--|----------------------------|---|
| 1       | PEC- IT 801 A  | Signals and Networks                   | NO                         | 0   |
| 2       | PEC- IT 801 B  | Cryptography & Network security        | NO                         | 0   |
| 3       | PEC- IT 801 C  | Speech and Natural language processing | NO                         | 0   |
| 4       | PEC- IT 801 D  | Internet of Things                     | YES                        | 61  |
| 5       | PEC- IT 801 E  | Remote Sensing and GIS                 | NO                         | 0   |
| 6       | OEC- IT 801 A  | Big data analysis                      | NO                         | 0   |
| 7       | OEC- IT 801 B  | Cyber Law and Ethics                   | YES                        | 61  |
| 8       | OEC- IT 801 C  | Mobile Computing                       | NO                         | 0   |
| 9       | OEC- IT 801 D  | Bioinformatics                         | NO                         | 0   |
| 10      | OEC- IT 801 E  | Robotics                               | NO                         | 0   |
| 11      | OEC - IT 802 A | E-Commerce and ERP                     | YES                        | 61  |
| 12      | OEC - IT 802 B | Micro electronics and VLSI Design      | NO                         | 0   |
| 13      | OEC - IT 802 C | Economic Policies in India             | NO                         | 0   |

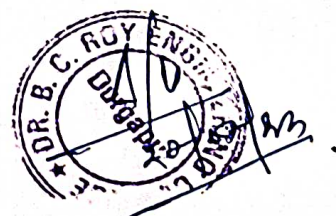
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| DR. B.C. ROY ENGINEERING COLLEGE, DURGAPUR |            |                         |                         |  |
|--|------------|-------------------------|-------------------------|--|
| DEPARTMENT: Computer Science & Engineering |            |                         |                         |  |
| B.TECH 5TH SEMESTER (AY 2022-23)           |            |                         |                         |  |
| NEW SYLLABUS                               |            |                         |                         |  |
| SRL NO.                                    | PAPER CODE | PAPER NAME              | Course Offered (Yes/No) | NO. OF STUDENTS ENROLLED IN & COMPLETED THE COURSE |
| 1  | PEC-IT501B | Artificial Intelligence | YES                     | 145  |

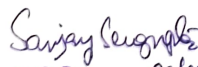
| DR. B.C. ROY ENGINEERING COLLEGE, DURGAPUR |            |                                  |                         |  |
|--|------------|----------------------------------|-------------------------|--|
| DEPARTMENT: Computer Science & Engineering |            |                                  |                         |  |
| B.TECH 6TH SEMESTER (AY 2022-23)           |            |                                  |                         |  |
| NEW SYLLABUS                               |            |                                  |                         |  |
| SRL NO.                                    | PAPER CODE | PAPER NAME                       | Course Offered (Yes/No) | NO. OF STUDENTS ENROLLED IN & COMPLETED THE COURSE |
| 1  | PEC-IT601A | Advanced Algorithms              | YES                     | 144  |
| 2  | PEC-IT602B | Data Mining and Data Warehousing | YES                     | 144  |
| 3  | OEC-IT601A | Numerical Methods                | YES                     | 144  |

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| DEPARTMENT: Computer Science & Engineering |            |                  |                         |  |
| B.TECH 7TH SEMESTER (AY 2022-23)           |            |                  |                         |  |
| NEW SYLLABUS                               |            |                  |                         |  |
| SRL NO.                                    | PAPER CODE | PAPER NAME       | Course Offered (Yes/No) | NO. OF STUDENTS ENROLLED IN & COMPLETED THE COURSE |
| 1  | PEC-CS701E | Machine Learning | YES                     | 140  |





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|--|------------|---|----------------------------|---|
| DEPARTMENT: CIVIL ENGINEERING              |            |   |                            |   |
| B.TECH 6TH SEMESTER (AY 2022-23)           |            |   |                            |   |
| NEW SYLLABUS                               |            |   |                            |   |
| SRL NO.                                    | PAPER CODE | PAPER NAME                                      | Course Offered<br>(Yes/No) | NO. OF STUDENTS<br>ENROLLED IN &<br>COMPLETED THE<br>COURSE |
| 1  | CE(PE)601A | Stability of Slopes                             | No                         | NA  |
| 2  | CE(PE)601B | Foundation Engineering                          | Yes                        | 61  |
| 3  | CE(PE)601C | Ground Improvement Technique                    | No                         | NA  |
| 4  | CE(PE)602A | Building Construction Practice                  | No                         | NA  |
| 5  | CE(PE)602B | Structural Analysis-II                          | Yes                        | 61  |
| 6  | CE(PE)602C | Industrial Structures                           | No                         | NA  |
| 7  | CE(OE)601A | Soft Skills and Interpersonal Communication – I | Yes                        | 61  |
| 8  | CE(OE)601B | Introduction to Philosophical Thoughts          | No                         | NA  |

  
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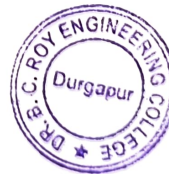
| DR. B.C. ROY ENGINEERING COLLEGE, DURGAPUR |            |   |                            |   |
|--|------------|---|----------------------------|---|
| DEPARTMENT: CIVIL ENGINEERING              |            |   |                            |   |
| B.TECH 7TH SEMESTER (AY 2022-23)           |            |   |                            |   |
| NEW SYLLABUS                               |            |   |                            |   |
| SRL NO                                     | PAPER CODE | PAPER NAME  | Course Offered<br>(Yes/No) | NO. OF STUDENTS<br>ENROLLED IN &<br>COMPLETED THE<br>COURSE |
| 1  | CE(OE)701A | Metro Systems & Engineering                                   | Yes                        | 60  |
| 2  | CE(OE)701B | ICT for Development   | No                         | NA  |
| 3  | CE(OE)701C | Cyber Law & Ethics  | No                         | NA  |
| 4  | CE(PE)701A | Computational Hydraulics                                      | No                         | NA  |
| 5  | CE(PE)701B | Disaster Preparedness and Planning                            | No                         | NA  |
| 6  | CE(PE)701C | Hydraulic Structure   | Yes                        | 60  |
| 7  | CE(PE)702A | Prestressed Concrete  | Yes                        | 60  |
| 8  | CE(PE)702B | Repairs & Rehabilitation of Structures                        | No                         | NA  |
| 9  | CE(PE)702C | Finite Element Method   | No                         | NA  |
| 10   | CE(PE)703A | Air and Noise Pollution and Control                           | Yes                        | 60  |
| 11   | CE(PE)703B | Physico-Chemical Processes for Water and Wastewater Treatment | No                         | NA  |
| 12   | CE(PE)703C | Water and Air Quality Modelling                               | No                         | NA  |
| 13   | CE(PE)704A | Structural Dynamics   | No                         | NA  |
| 14   | CE(PE)704B | Advanced Structural Analysis                                  | Yes                        | 60  |
| 15   | CE(PE)704C | Coastal Hydraulics and Sediment Transport                     | No                         | NA  |
| 16   | CE(PE)705A | Railway and Airport Engineering                               | No                         | NA  |
| 17   | CE(PE)705B | Pavement Design   | Yes                        | 60  |
| 18   | CE(PE)705C | Transport System Planning                                     | No                         | NA  |

  
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|--|------------|---|----------------------------|---|
| DEPARTMENT: CIVIL ENGINEERING              |            |   |                            |   |
| B.TECH 8TH SEMESTER (AY 2022-23)           |            |   |                            |   |
| NEW SYLLABUS                               |            |   |                            |   |
| SRL NO.                                    | PAPER CODE | PAPER NAME  | Course Offered<br>(Yes/No) | NO. OF STUDENTS<br>ENROLLED IN &<br>COMPLETED THE<br>COURSE |
| 1  | CE(PE)801A | GIS & Remote Sensing                                    | No                         | NA  |
| 2  | CE(PE)801B | Rock Mechanics  | No                         | NA  |
| 3  | CE(PE)801C | Environmental laws and Policy                           | No                         | NA  |
| 4  | CE(PE)801D | Pavement Materials and Design                           | Yes                        | 60  |
| 5  | CE(OE)801A | Human Resource Development and Organizational Behavior  | No                         | NA  |
| 6  | CE(OE)801B | Bridge Engineering                                      | No                         | NA  |
| 7  | CE(OE)801C | Deep Foundations  | Yes                        | 60  |
| 8  | CE(OE)801D | Groundwater Contamination                               | No                         | NA  |
| 9  | CE(OE)802A | Soft Skills and Personality Development                 | No                         | NA  |
| 10   | CE(OE)802B | Earthquake Engineering                                  | No                         | NA  |
| 11   | CE(OE)802C | Urban Transport Planning                                | No                         | NA  |
| 12   | CE(OE)802D | Environmental Impact Assessment and Life cycle Analysis | Yes                        | 60  |


  
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|--|------------|--|----------------------------|--|
| DEPARTMENT: MECHANICAL                     |            |  |                            |  |
| B.TECH 6TH SEMESTER (AY 2022-23)           |            |  |                            |  |
| NEW SYLLABUS                               |            |  |                            |  |
| SRL NO.                                    | PAPER CODE | PAPER NAME                                   | Course Offered<br>(Yes/No) | NO OF STUDENTS<br>ENROLLED IN &<br>COMPLETED THE<br>COURSE |
| 1  | PEME601A   | Internal Combustion Engines and Gas Turbines | Y                          | 50   |
| 2  | PEME602C   | Turbo Machinery                              | Y                          | 50   |
| 3  | PEME602G   | Mechatronics                                 | Y                          | 56   |
| 4  | PEME601A   | Internal Combustion Engines and Gas Turbines | Y                          | 56   |

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|--|------------|----------------------------------|----------------------------|---|
| DEPARTMENT: MECHANICAL                     |            |                                  |                            |   |
| B.TECH 7TH SEMESTER (AY 2022-23)           |            |                                  |                            |   |
| NEW SYLLABUS                               |            |                                  |                            |   |
| SRL NO.                                    | PAPER CODE | PAPER NAME                       | Course Offered<br>(Yes/No) | NO. OF STUDENTS<br>ENROLLED IN &<br>COMPLETED THE<br>COURSE |
| 1  | PE-ME 701A | AUTOMOBIL ENGINEERING            | Y                          | 66  |
| 2  | PE-ME 701H | ADVANCED WELDING TECHNOLOGY      | Y                          | 60  |
| 3  | PE-ME 702E | SELECTION & TESTING OF MATERIALS | Y                          | 66  |
| 4  | PE-ME 702J | CAD/CAM                          | Y                          | 60  |
| 5  | OE-ME 701H | M/C LEARNING                     | Y                          | 66  |
| 6  | OE-ME 701I | WATER RESOURCE ENGINEERING       | Y                          | 60  |

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| B.TECH 8TH SEMESTER (AY 2022-23)           |            |  |                            |  |
| NEW SYLLABUS                               |            |  |                            |  |
| SRL NO.                                    | PAPER CODE | PAPER NAME                                 | Course Offered<br>(Yes/No) | NO OF STUDENTS<br>ENROLLED IN &<br>COMPLETED THE<br>COURSE |
| 1  | PEME802F   | 3D Printing and Design                     | Y                          | 66   |
| 2  | PEME801B   | Power Plant Engineering                    | Y                          | 66   |
| 3  | PEME801A   | Analysis and Performance of Fluid Machines | Y                          | 60   |
| 4  | PEME802I   | Maintenance Engineering                    | Y                          | 60   |
| 5  | OEME801D   | Industrial Pollution and Control           | Y                          | 66   |
| 6  | OEME801F   | Waste to Energy- An Overview               | Y                          | 60   |
| 7  | OEME802G   | Automation & Control                       | Y                          | 66   |
| 8  | OEME802L   | Data Sciences                              | Y                          | 60   |

  
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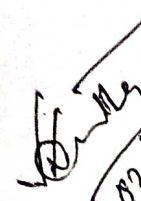
| DR. B.C. ROY ENGINEERING COLLEGE, DURGAPUR |            |                                     |                         |  |
|--|------------|-------------------------------------|-------------------------|--|
| DEPARTMENT: Electrical Engineering         |            |                                     |                         |  |
| B.TECH 5TH SEMESTER (AY 2022-23)           |            |                                     |                         |  |
| NEW SYLLABUS                               |            |                                     |                         |  |
| SRL NO.                                    | PAPER CODE | PAPER NAME                          | Course Offered (Yes/No) | NO. OF STUDENTS ENROLLED IN & COMPLETED THE COURSE |
| 1  | OE-EE-501A | DATA STRUCTURE & ALGORITHM          | No                      | 0  |
| 2  | OE-EE-501B | OBJECT ORIENTED PROGRAMMING         | Yes                     | 111  |
| 3  | OE-EE-501C | COMPUTER ORGANISATION               | No                      | 0  |
| 4  | PE-EE-501A | HIGH VOLTAGE ENGINEERING            | No                      | 0  |
| 5  | PE-EE-501B | POWER PLANT ENGINEERING             | Yes                     | 111  |
| 6  | PE-EE-501C | RENEWABLE & NON CONVENTIONAL ENERGY | No                      | 0  |

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| DEPARTMENT: Electrical Engineering         |            |                               |                         |  |
| B.TECH 6TH SEMESTER (AY 2022-23)           |            |                               |                         |  |
| NEW SYLLABUS                               |            |                               |                         |  |
| SRL NO.                                    | PAPER CODE | PAPER NAME                    | Course Offered (Yes/No) | NO. OF STUDENTS ENROLLED IN & COMPLETED THE COURSE |
| 1  | PE-EE-601A | DIGITAL CONTROL SYSTEM        | No                      | 0  |
| 2  | PE EE 601B | HVDC TRANSMISSION             | Yes                     | 110  |
| 3  | PE-EE-601C | ELECTRICAL MACHINE DESIGN     | No                      | 0  |
| 4  | PE-EE-602A | ELECTRICAL & HYBRID VEHICLE   | Yes                     | 110  |
| 5  | PE-EE-602B | POWER QUALITY AND FACTS       | No                      | 0  |
| 6  | PE-EE-602C | INDUSTRIAL ELECTRICAL SYSTEMS | No                      | 0  |
| 7  | OE-601A    | DIGITAL SIGNAL PROCESSING     | No                      | 0  |
| 8  | OE-601C    | VLSI AND MICRO ELECTRONICS    | Yes                     | 110  |
| 9  | OE-601B    | COMMUNICATION ENGINEERING     | No                      | 0  |

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| DR. B.C. ROY ENGINEERING COLLEGE, DURGAPUR |            |   |                         |  |
|--|------------|---|-------------------------|--|
| DEPARTMENT: Electrical Engineering         |            |   |                         |  |
| B.TECH 7TH SEMESTER (AY 2022-23)           |            |   |                         |  |
| NEW SYLLABUS                               |            |   |                         |  |
| SRL NO.                                    | PAPER CODE | PAPER NAME                                | Course Offered (Yes/No) | NO. OF STUDENTS ENROLLED IN & COMPLETED THE COURSE |
| 1  | OE-EE-701A | ARTIFICIAL INTELLIGENCE                   | Yes                     | 64   |
| 2  | OE-EE-701B | INTERNET OF THINGS                        | Yes                     | 60   |
| 3  | OE-EE-701C | COMPUTER GRAPHICS                         | No                      | 0  |
| 4  | OE-EE-702A | EMBEDDED SYSTEM                           | No                      | 0  |
| 5  | OE-EE-702B | DIGITAL IMAGE PROCESSING                  | No                      | 0  |
| 6  | OE-EE-702C | COMPUTER NETWORK                          | Yes                     | 124  |
| 7  | PE-EE-701A | CONTROL SYSTEM DESIGN                     | No                      | 0  |
| 8  | PE-EE-701B | ELECTRICAL ENERGY CONSERVATION & AUDITING | No                      | 0  |
| 9  | PE-EE-701C | POWER GENERATION ECONOMICS                | Yes                     | 124  |

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|--|------------|---|-------------------------|--|
| DEPARTMENT: Electrical Engineering         |            |   |                         |  |
| B.TECH 8TH SEMESTER (AY 2022-23)           |            |   |                         |  |
| NEW SYLLABUS                               |            |   |                         |  |
| SRL NO.                                    | PAPER CODE | PAPER NAME                                | Course Offered (Yes/No) | NO. OF STUDENTS ENROLLED IN & COMPLETED THE COURSE |
| 1  | PE-EE 801A | LINE COMMUTATED AND ACTIVE PWM RECTIFIERS | No                      | 0  |
| 2  | PE-EE 801B | POWER SYSTEM DYNAMICS AND CONTROL         | No                      | 0  |
| 3  | PE-EE 801C | ADVANCED ELECTRIC DRIVE                   | Yes                     | 66   |
| 4  | PE-EE-801D | Industrial Autom & Control                | Yes                     | 58   |
| 5  | OE-EE 801A | SOFT COMPUTING TECHNIQUES                 | No                      | 0  |
| 6  | OE-EE 801B | BIOMEDICAL INSTRUMENTATION                | Yes                     | 124  |
| 7  | OE-EE 801C | INTRODUCTION TO MACHINE LEARNING          | No                      | 0  |
| 8  | OE-EE 801D | SENSORS AND TRANSDUCERS                   | No                      | 0  |

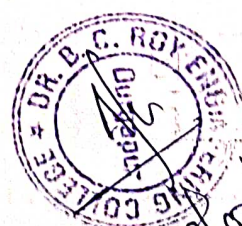
  
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| DR. B.C. ROY ENGINEERING COLLEGE, DURGAPUR |             |                         |                            |   |
|--|-------------|-------------------------|----------------------------|---|
| DEPARTMENT: Computer Science & Engineering |             |                         |                            |   |
| M.TECH 1ST SEMESTER (AY 2022-23)           |             |                         |                            |   |
| SRL NO.                                    | PAPER CODE  | PAPER NAME              | Course Offered<br>(Yes/No) | NO. OF STUDENTS<br>ENROLLED IN &<br>COMPLETED THE<br>COURSE |
| 1  | PG CSE 105C | Advanced Soft Computing | Yes                        | 7   |

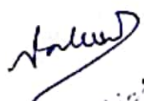
| DR. B.C. ROY ENGINEERING COLLEGE, DURGAPUR |             |                  |                            |   |
|--|-------------|------------------|----------------------------|---|
| DEPARTMENT: Computer Science & Engineering |             |                  |                            |   |
| M.TECH 2ND SEMESTER (AY 2022-23)           |             |                  |                            |   |
| NEW SYLLABUS                               |             |                  |                            |   |
| SRL NO.                                    | PAPER CODE  | PAPER NAME       | Course Offered<br>(Yes/No) | NO. OF STUDENTS<br>ENROLLED IN &<br>COMPLETED THE<br>COURSE |
| 1  | PG CSE 204D | Soft Computing   | YES                        | 5   |
| 2  | PG CSE 205A | Image Processing | YES                        | 5   |

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|--|-------------|-----------------------------------|----------------------------|---|
| DEPARTMENT: Computer Science & Engineering |             |                                   |                            |   |
| M.TECH 3RD SEMESTER (AY 2022-23)           |             |                                   |                            |   |
| NEW SYLLABUS                               |             |                                   |                            |   |
| SRL NO.                                    | PAPER CODE  | PAPER NAME                        | Course Offered<br>(Yes/No) | NO. OF STUDENTS<br>ENROLLED IN &<br>COMPLETED THE<br>COURSE |
| 1  | PG CSE 301B | Teaching & Research Methodologies | YES                        | 8   |
| 2  | PG CSE 302C | Data Mining & Data WareHousing    | YES                        | 8   |





|     | NEW SYLLABUS | SESSION START 2019-20                                      |     | 2022-23 |
|-----|--------------|--|-----|---------|
| 1ST | MCE103A      | Wireless Sensor Networks                                   | NA  |         |
|     | MCE103B      | Optical Networks   | NA  |         |
|     | MCE103C      | Statistical Information Processing                         | NA  |         |
|     | MCE104A      | Cognitive Radio  | NA  |         |
|     | MCE104B      | RF and Microwave Circuit Design                            | NA  |         |
|     | MCE104C      | DSP Architecture   | NA  |         |
|     | MCE106A      | English for Research Paper Writing                         | NA  |         |
|     | MCE106B      | Pedagogy Studies   | NA  |         |
|     | MCE106C      | Value Education  | NA  |         |
|     | MCE106D      | Stress Management by Yoga                                  | NA  |         |
| 2ND | MCE203A      | Satellite Communication                                    | NA  |         |
|     | MCE203B      | Internet of Things   | NA  |         |
|     | MCE203C      | Voice and data networks                                    | NA  |         |
|     | MCE204A      | Markov Chain and Queuing System                            | NA  |         |
|     | MCE204B      | MIMO System  | NA  |         |
|     | MCE204C      | Programmable Networks –SDN, NFV                            | NA  |         |
|     |              | Personality Development through Life Enlightenment Skills. |     |         |
|     | MCE205A      |  | NA  |         |
|     | MCE205B      | Sanskrit for Technical Knowledge                           | NA  |         |
|     | MCE205C      | Constitution of India                                      | NA  |         |
|     | MCE205D      | Disaster Management  | NA  |         |
| 3RD | MCE 301A     | High Performance Networks                                  | NO  | 0       |
|     | MCE 301B     | Pattern Recognition and Machine Learning                   | YES | 2       |
|     | MCE 301C     | Remote Sensing   | NO  | 0       |
|     | MCE 302 A    | Business Analytics   | NO  | 0       |
|     | MCE 302 B    | Operations Research  | YES | 2       |
|     | MCE 302 C    | Cost Management of Engineering Projects                    | NO  | 0       |
|     | MCE 302 D    | Industrial Safety  | NO  | 0       |
|     | MCE 302 E    | Composite Materials  | NO  | 0       |
|     | MCE 302 F    | Waste to Energy  | NO  | 0       |

  
 Head  
 Dept. Electronics & Comm. Engg.  
 Dr. B. C. Roy Engineering College  
 Durgapur



**Dr. B. C. Roy Engineering College, Durgapur**  
**Department of Computer Applications (MCA)**

**M.C.A. 1ST SEMESTER (AY 2022-23)**

| SRL NO. | PAPER CODE | PAPER NAME                     | Course Offered (Yes/No) | NO. OF STUDENTS ENROLLED IN & COMPLETED THE COURSE |
|---------|------------|--------------------------------|-------------------------|--|
| 1       | MCAN-E105A | Environment and Ecology        | No                      | NIL  |
| 2       | MCAN-E105B | Management Accounting          | No                      | NIL  |
| 3       | MCAN-E105C | Constitution of India          | No                      | NIL  |
| 4       | MCAN-E105D | Stress Management through Yoga | No                      | NIL  |
| 5       | MCAN-E105E | Ethics in Business Profession  | Yes                     | 60   |
| 6       | MCAN-E105F | Managerial Economics           | No                      | NIL  |

**M.C.A. 2ND SEMESTER (AY 2022-23)**

| SRL NO. | PAPER CODE | PAPER NAME                                   | Course Offered (Yes/No) | NO. OF STUDENTS ENROLLED IN & COMPLETED THE COURSE |
|---------|------------|--|-------------------------|--|
| 1       | MCAN-E205A | Numerical and Statistical Analysis           | Yes                     | 15   |
| 2       | MCAN-E205B | Computer Graphics                            | Yes                     | 15   |
| 3       | MCAN-E205C | Probability and Statistics                   | No                      | NIL  |
| 4       | MCAN-E205D | Introduction to Cyber Security               | Yes                     | 15   |
| 5       | MCAN-E205E | Introduction to IoT                          | No                      | NIL  |
| 6       | MCAN-E205F | Automata Theory and Computational Complexity | Yes                     | 15   |

**M.C.A. 3RD SEMESTER (AY 2022-23)**

| SRL NO. | PAPER CODE | PAPER NAME                                     | Course Offered (Yes/No) | NO. OF STUDENTS ENROLLED IN & COMPLETED THE COURSE |
|---------|------------|--|-------------------------|--|
| 1       | MCAN-E304A | Image Processing                               | No                      | NIL  |
| 2       | MCAN-E304B | Web Enabled JAVA Programming                   | Yes                     | 29   |
| 3       | MCAN-E304C | Cloud Computing                                | No                      | NIL  |
| 4       | MCAN-E304D | Web Technology using PHP                       | Yes                     | 30   |
| 5       | MCAN-E304E | Android Application Development                | No                      | NIL  |
| 6       | MCAN-E304F | Basic Data Science                             | No                      | NIL  |
| 7       | MCAN-E305A | Information Retrieval                          | No                      | NIL  |
| 8       | MCAN-E305B | Data Warehousing and Data Mining               | Yes                     | 30   |
| 9       | MCAN-E305C | Introduction to Big Data Analytics             | No                      | NIL  |
| 10      | MCAN-E305D | Graph Theory                                   | No                      | NIL  |
| 11      | MCAN-E305E | Operation Research and Optimization Techniques | No                      | NIL  |
| 12      | MCAN-E305F | Pattern Recognition                            | No                      | NIL  |
| 13      | MCAN-E305G | Machine Learning                               | Yes                     | 29   |

*Pranab Kumar*  
27/10/2023

**DR. PABITRA KUMAR DEY**  
HOD - MCA  
Dr. B. C. Roy Engineering College



| DR. B.C. ROY ENGINEERING COLLEGE, DURGAPUR |            |                                       |                         |  |
|--|------------|---------------------------------------|-------------------------|--|
| DEPARTMENT: Electrical Engineering         |            |                                       |                         |  |
| M.TECH 1st SEMESTER (AY 2022-23)           |            |                                       |                         |  |
| NEW SYLLABUS                               |            |                                       |                         |  |
| SRL NO.                                    | PAPER CODE | PAPER NAME                            | Course Offered (Yes/No) | NO. OF STUDENTS ENROLLED IN & COMPLETED THE COURSE |
| 1  | PSM 103(a) | Power System Planning and Reliability | Yes                     | 5  |
| 2  | PSM 103(b) | Power System Apparatus                | No                      | 0  |
| 3  | PSM 103(c) | Power Quality                         | No                      | 0  |
| 4  | PSM 104(a) | Optimization Techniques               | Yes                     | 5  |
| 5  | PSM 104(b) | Soft Computing Technique              | No                      | 0  |
| 6  | PSM 104(c) | Digital Signal Processing             | No                      | 0  |
| 7  | PSM 104(d) | Object Oriented Programming           | No                      | 0  |

| DR. B.C. ROY ENGINEERING COLLEGE, DURGAPUR |            |   |                         |  |
|--|------------|---|-------------------------|--|
| DEPARTMENT: Electrical Engineering         |            |   |                         |  |
| M.TECH 2nd SEMESTER (AY 2022-23)           |            |   |                         |  |
| NEW SYLLABUS                               |            |   |                         |  |
| SRL NO.                                    | PAPER CODE | PAPER NAME                                  | Course Offered (Yes/No) | NO. OF STUDENTS ENROLLED IN & COMPLETED THE COURSE |
| 1  | PSM 204(a) | Power System Transient                      | No                      | 0  |
| 2  | PSM 204(b) | Flexible A.C. Transmission System           | Yes                     | 5  |
| 3  | PSM 204(c) | Advanced Electrical Drives                  | No                      | 0  |
| 4  | PSM 205(a) | Advanced Control System                     | Yes                     | 5  |
| 5  | PSM 205(b) | Modeling and Simulation of dynamic systems  | No                      | 0  |
| 6  | PSM 205(c) | Advanced Microprocessor and Microcontroller | No                      | 0  |

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|--|-------------|-----------------------------|-------------------------|--|
| DEPARTMENT: Electrical Engineering         |             |                             |                         |  |
| M.TECH 3rd SEMESTER (AY 2022-23)           |             |                             |                         |  |
| NEW SYLLABUS                               |             |                             |                         |  |
| SRL NO.                                    | PAPER CODE  | PAPER NAME                  | Course Offered (Yes/No) | NO. OF STUDENTS ENROLLED IN & COMPLETED THE COURSE |
| 1  | PSM 301 (a) | Non-conventional Energy     | Yes                     | 4  |
| 2  | PSM 301 (b) | Power System Harmonics      | No                      | 0  |
| 3  | PSM 301 (c) | Energy Management and Audit | No                      | 0  |

04-08-2023  
HOD/EE



DR. B. C. ROY ENGINEERING COLLEGE, DURGAPUR

DEPARTMENT: FACULTY OF MANAGEMENT STUDIES

MBA 3RD SEMESTER (AY 2022-23)

NEW SYLLABUS

| SL. NO. | PAPER CODE | PAPER NAME                            | Course Offered (Yes/No) | NO. OF STUDENTS ENROLLED IN & COMPLETED THE COURSE |
|---------|------------|---------------------------------------|-------------------------|--|
| 1       | MM 302     | DIGITAL & SOCIAL MEDIA MARKETING      | Yes                     | 35   |
| 2       | MM 304     | MARKETING RESEARCH                    | Yes                     | 35   |
| 3       | MM 301     | B2B MARKETING                         | Yes                     | 20   |
| 4       | MM 303     | IMC/ PROMOTION STRATEGY               | Yes                     | 20   |
| 5       | FM 301     | TAXATION                              | Yes                     | 14   |
| 6       | FM 304     | CORPORATE FINANCE                     | Yes                     | 14   |
| 7       | FM 302     | PROJECT APPRAISAL & FINANCE           | Yes                     | 13   |
| 8       | FM 303     | BEHAVIORAL FINANCE                    | Yes                     | 13   |
| 9       | HR 302     | HR METRICS AND ANALYTICS              | Yes                     | 10   |
| 10      | HR 304     | ORGANIZATIONAL DESIGN                 | Yes                     | 10   |
| 11      | HR 301     | TEAM DYNAMICS AT WORK                 | Yes                     | 15   |
| 12      | HR 303     | CROSS CULTURAL MANAGEMENT             | Yes                     | 15   |
| 13      | MIS 301    | RELATIONAL DATABASE MANAGEMENT SYSTEM | Yes                     | 11   |
| 14      | MIS 302    | E-COMMERCE & DIGITAL MARKETS          | Yes                     | 11   |

*Somroop Siddhanta*

PROF. (DR.) SOMROOP SIDDHANTA

**Head**  
**Faculty of Management Studies**  
Dr. B. C. Roy Engineering College, Durgapur



**DR. B. C. ROY ENGINEERING COLLEGE, DURGAPUR**  
**DEPARTMENT: FACULTY OF MANAGEMENT STUDIES**  
**MBA 4TH SEMESTER (AY 2022-23)**

**NEW SYLLABUS**

| SL. NO. | PAPER CODE | PAPER NAME                                     | Course Offered (Yes/No) | NO. OF STUDENTS ENROLLED IN & COMPLETED THE COURSE |
|---------|------------|--|-------------------------|--|
| 1       | MM 401     | CONSUMER BEHAVIOUR                             | Yes                     | 35   |
| 2       | MM 402     | RETAIL MANAGEMENT                              | Yes                     | 35   |
| 3       | MM 404     | SERVICE MARKETING                              | Yes                     | 35   |
| 4       | MM 406     | INTERNATIONAL MARKETING                        | Yes                     | 35   |
| 5       | MM 403     | SALES & DISTRIBUTION MANAGEMENT                | Yes                     | 20   |
| 6       | MM 405     | PRODUCT & BRAND MANAGEMENT                     | Yes                     | 20   |
| 7       | FM 401     | INVESTMENT ANALYSIS & PORTFOLIO MANAGEMENT     | Yes                     | 14   |
| 8       | FM 403     | MERGERS, ACQUISITION & CORPORATE RESTRUCTURING | Yes                     | 14   |
| 9       | FM 404     | FINANCIAL DERIVATIVES                          | Yes                     | 14   |
| 10      | FM 405     | INTERNATIONAL FINANCE                          | Yes                     | 14   |
| 11      | FM 402     | MANAGING BANKS & FINANCIAL INSTITUTIONS        | Yes                     | 13   |
| 12      | FM 406     | FINANCIAL MARKETS & SERVICES                   | Yes                     | 13   |
| 13      | HR 401     | MANPOWER PLANNING RECRUITMENT & SELECTION      | Yes                     | 10   |
| 14      | HR 402     | EMPLOYEE RELATIONS & LABOUR LAWS               | Yes                     | 10   |
| 15      | HR 403     | COMPENSATION & BENEFITS MANAGEMENT             | Yes                     | 10   |
| 16      | HR 404     | PERFORMANCE MANAGEMENT SYSTEMS                 | Yes                     | 10   |
| 17      | HR 405     | STRATEGIC HRM                                  | Yes                     | 15   |
| 18      | HR 406     | INTERNATIONAL HRM                              | Yes                     | 15   |
| 19      | MIS 403    | STRATEGIC MANAGEMENT FOR IT                    | Yes                     | 11   |
| 20      | MIS 404    | BUSINESS DECISIONS USING ADVANCED EXCEL        | Yes                     | 11   |

*Somroop Siddhanta*


PROF. (DR.) SOMROOP SIDDHANTA

**Head**  
**Faculty of Management Studies**  
**Dr. B. C. Roy Engineering College, Durgapur**



| DR. B.C. ROY ENGINEERING COLLEGE, DURGAPUR |            |                               |                            |   |
|--|------------|-------------------------------|----------------------------|---|
| DEPARTMENT: MECHANICAL                     |            |                               |                            |   |
| M.TECH 1ST SEMESTER (AY 2022-23)           |            |                               |                            |   |
| NEW SYLLABUS                               |            |                               |                            |   |
| SRL NO.                                    | PAPER CODE | PAPER NAME                    | Course Offered<br>(Yes/No) | NO. OF STUDENTS<br>ENROLLED IN &<br>COMPLETED THE<br>COURSE |
| 1  | MME103A    | ADVANCED METAL CUTTING THEORY | Y                          | 5   |
| 2  | MME104C    | PRODUCTION PLANING & CONTROL  | Y                          | 5   |

| DR. B.C. ROY ENGINEERING COLLEGE, DURGAPUR |            |                                       |                            |   |
|--|------------|---------------------------------------|----------------------------|---|
| DEPARTMENT: MECHANICAL                     |            |                                       |                            |   |
| M.TECH 2ND SEMESTER (AY 2022-23)           |            |                                       |                            |   |
| NEW SYLLABUS                               |            |                                       |                            |   |
| SRL NO.                                    | PAPER CODE | PAPER NAME                            | Course Offered<br>(Yes/No) | NO. OF STUDENTS<br>ENROLLED IN &<br>COMPLETED THE<br>COURSE |
| 1  | MME203A    | Design of Material Handling Equipment | Y                          | 5   |
| 2  | MME204A    | ADVANCED ROBOTICS                     | Y                          | 5   |
| 3  | MME205A    | ADVANCED METROLOGY                    | Y                          | 5   |

  
**H.O.D. I.M.E.**  
 Dr. B. C. Roy Engg. College, Durgapur