



**Indian Institute of Technology Bhubaneswar**  
**Autumn End-Semester Examination - 2024-25(Centrally Planned Subjects)**  
**Dual Degree ( Semester-1 )**

| Date / Day                            | B.Tech. in Mechanical Engineering and M.Tech. in Mechanical Systems Design | B.Tech. in Metallurgical and Materials Engineering and M.Tech. in Metallurgical and Materials Engineering | B.Tech. in Electrical Engineering and M.Tech. in Power Electronics and Drives |
|---------------------------------------|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| <b>09:30 AM - 12:30 PM (Forenoon)</b> |                                                                            |                                                                                                           |                                                                               |
| 19-11-2024<br>Tuesday                 | Mathematics - I                                                            | -                                                                                                         | -                                                                             |
| 21-11-2024<br>Thursday                | -                                                                          | Electrical Technology                                                                                     | -                                                                             |
| 26-11-2024<br>Tuesday                 | Physics                                                                    | -                                                                                                         | Physics                                                                       |



**Indian Institute of Technology Bhubaneswar**  
**Autumn End-Semester Examination - 2024-25(Centrally Planned Subjects)**  
**Dual Degree ( Semester-2 )**

| Date / Day                            | B.Tech. in Mechanical Engineering and M.Tech. in Thermal Science and Engineering | B.Tech. in Civil Engineering and M.Tech. in Transportation Engineering | B.Tech. in Civil Engineering and M.Tech. in Structural Engineering | B.Tech. in Electrical Engineering and M.Tech. in Power Electronics and Drives | B.Tech. in Metallurgical and Materials Engineering and M.Tech. in Metallurgical and Materials Engineering | B.Tech. in Civil Engineering and M.Tech. in Environmental Engineering | B.Tech. in Computer Science and Engineering and M.Tech. in Computer Science and Engineering |
|---------------------------------------|----------------------------------------------------------------------------------|------------------------------------------------------------------------|--------------------------------------------------------------------|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| <b>09:30 AM - 12:30 PM (Forenoon)</b> |                                                                                  |                                                                        |                                                                    |                                                                               |                                                                                                           |                                                                       |                                                                                             |
| 21-11-2024<br>Thursday                | Electrical Technology                                                            | Electrical Technology                                                  | Electrical Technology                                              | Electrical Technology                                                         | -                                                                                                         | -                                                                     | -                                                                                           |
| 23-11-2024<br>Saturday                | -                                                                                | -                                                                      | -                                                                  | -                                                                             | Mechanics                                                                                                 | English for Communication                                             | Mechanics                                                                                   |



**Indian Institute of Technology Bhubaneswar**  
**Autumn End-Semester Examination - 2024-25(Centrally Planned Subjects)**  
**Dual Degree ( Semester-3 )**

| Date / Day                           | B.Tech. in Civil Engineering and M.Tech. in Structural Engineering | B.Tech. in Mechanical Engineering and M.Tech. in Mechanical Systems Design | B.Tech. in Mechanical Engineering and M.Tech. in Manufacturing Engineering | B.Tech. in Electrical Engineering and M.Tech. in Power Electronics and Drives | B.Tech. in Computer Science and Engineering and M.Tech. in Computer Science and Engineering | B.Tech. in Civil Engineering and M.Tech. in Environmental Engineering | B.Tech. in Mechanical Engineering and M.Tech. in Thermal Science and Engineering | B.Tech. in Metallurgical and Materials Engineering and M.Tech. in Metallurgical and Materials Engineering | B.Tech. in Civil Engineering and M.Tech. in Transportation Engineering |
|--------------------------------------|--------------------------------------------------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| <b>2:30 PM - 5:30 PM (Afternoon)</b> |                                                                    |                                                                            |                                                                            |                                                                               |                                                                                             |                                                                       |                                                                                  |                                                                                                           |                                                                        |
| 18-11-2024<br>Monday                 | Introduction to Bioscience and Technology                          | Introduction to Bioscience and Technology                                  | Introduction to Bioscience and Technology                                  | Introduction to Bioscience and Technology                                     | Introduction to Bioscience and Technology                                                   | Introduction to Bioscience and Technology                             | Introduction to Bioscience and Technology                                        | Introduction to Bioscience and Technology                                                                 | Introduction to Bioscience and Technology                              |
| 19-11-2024<br>Tuesday                | Surveying                                                          | -                                                                          | -                                                                          | Signals and Systems                                                           | Signals and Systems                                                                         | Surveying                                                             | -                                                                                | Numerical Methods                                                                                         | Surveying                                                              |
| 20-11-2024<br>Wednesday              | Basic Electronics                                                  | Basic Electronics                                                          | Basic Electronics                                                          | Introduction to Electronics                                                   | Introduction to Electronics                                                                 | Basic Electronics                                                     | Basic Electronics                                                                | Basic Electronics                                                                                         | Basic Electronics                                                      |
| 21-11-2024<br>Thursday               | -                                                                  | -                                                                          | -                                                                          | -                                                                             | -                                                                                           | -                                                                     | -                                                                                | Thermodynamics of Materials                                                                               | -                                                                      |
| 22-11-2024<br>Friday                 | Introduction to Materials Science and Engineering                  | Introduction to Materials Science and Engineering                          | Introduction to Materials Science and Engineering                          | Introduction to Materials Science and Engineering                             | Discrete Structures                                                                         | Introduction to Materials Science and Engineering                     | Introduction to Materials Science and Engineering                                | Introduction to Materials Science and Engineering                                                         | Introduction to Materials Science and Engineering                      |
| 23-11-2024<br>Saturday               | Solid Mechanics                                                    | Fluid Mechanics                                                            | Fluid Mechanics                                                            | -                                                                             | -                                                                                           | Solid Mechanics                                                       | Fluid Mechanics                                                                  | -                                                                                                         | Solid Mechanics                                                        |
| 25-11-2024<br>Monday                 | Probability, Statistics & Stochastic Processes                     | -                                                                          | -                                                                          | Probability, Statistics & Stochastic Processes                                | -                                                                                           | Probability, Statistics & Stochastic Processes                        | -                                                                                | -                                                                                                         | Probability, Statistics & Stochastic Processes                         |
| 26-11-2024<br>Tuesday                | -                                                                  | Transform Calculus                                                         | Transform Calculus                                                         | -                                                                             | Data Structures                                                                             | -                                                                     | Transform Calculus                                                               | -                                                                                                         | -                                                                      |

|                         |                              |                              |   |                                                                                                                                                                                                                               |                                                                                                                                                                                               |                              |   |                                                                                                                                                                                                                      |   |
|-------------------------|------------------------------|------------------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| 27-11-2024<br>Wednesday | Introduction to<br>Economics | Introduction to<br>Economics | - | Social Psychology/<br>Introduction to<br>Philosophy/<br>International<br>Business/<br>Introduction to<br>Economics/<br>Macroeconomics<br>and Business<br>Environment/<br>Entrepreneurship<br>and Small Business<br>Management | Speaking and<br>Presentation/<br>Critical Thinking/<br>Introduction to<br>Economics/<br>Introduction to<br>Philosophy/<br>Macroeconomics<br>and Business<br>Environment/<br>Social Psychology | Introduction to<br>Economics | - | Speaking and<br>Presentation/<br>Introduction to<br>Economics/<br>Critical Thinking/<br>Macroeconomics<br>and Business<br>Environment/<br>Social Psychology/<br>Entrepreneurship<br>and Small Business<br>Management | - |
|-------------------------|------------------------------|------------------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|



**Indian Institute of Technology Bhubaneswar**  
**Autumn End-Semester Examination - 2024-25(Centrally Planned Subjects)**  
**Dual Degree ( Semester-5 )**

| Date / Day                            | B.Tech. in Metallurgical and Materials Engineering and M.Tech. in Metallurgical and Materials Engineering | B.Tech. in Civil Engineering and M.Tech. in Transportation Engineering | B.Tech. in Civil Engineering and M.Tech. in Environmental Engineering | B.Tech. in Civil Engineering and M.Tech. in Structural Engineering | B.Tech. in Electrical Engineering and M.Tech. in Power Electronics and Drives | B.Tech. in Computer Science and Engineering and M.Tech. in Computer Science and Engineering | B.Tech. in Mechanical Engineering and M.Tech. in Thermal Science and Engineering | B.Tech. in Mechanical Engineering and M.Tech. in Mechanical Systems Design | B.Tech. in Mechanical Engineering and M.Tech. in Manufacturing Engineering |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------------------------------|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------|
| <b>09:30 AM - 12:30 PM (Forenoon)</b> |                                                                                                           |                                                                        |                                                                       |                                                                    |                                                                               |                                                                                             |                                                                                  |                                                                            |                                                                            |
| 18-11-2024<br>Monday                  | Mineral processing                                                                                        | Soil Mechanics                                                         | Soil Mechanics                                                        | Soil Mechanics                                                     | Power Electronics                                                             | Formal Languages and Automata Theory                                                        | -                                                                                | -                                                                          | -                                                                          |
| 19-11-2024<br>Tuesday                 | -                                                                                                         | -                                                                      | -                                                                     | -                                                                  | Electrical Power Transmission and Distribution                                | -                                                                                           | Heat Transfer                                                                    | Heat Transfer                                                              | Heat Transfer                                                              |
| 22-11-2024<br>Friday                  | Mechanical properties and testing of materials                                                            | Design of Reinforced Concrete Structures                               | Design of Reinforced Concrete Structures                              | Design of Reinforced Concrete Structures                           | -                                                                             | Computer Organization and Architecture                                                      | -                                                                                | -                                                                          | -                                                                          |
| 23-11-2024<br>Saturday                | Corrosion and surface engineering                                                                         | -                                                                      | -                                                                     | -                                                                  | Electromagnetic Field Theory                                                  | -                                                                                           | -                                                                                | -                                                                          | -                                                                          |

|                               |                                                                                                                                     |                                                                                                                    |                                                                                                                                                                    |                                                                                                                                                                                      |                                                                                                                                                                                     |                                                                                                                                                                                                              |                                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                                                                   |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 25-11-2024<br>Monday          | Construction Planning and Management/ Microcontrollers and Embedded Systems/ Applied Thermodynamics/ Introduction to Ocean Dynamics | Introduction to Ocean Dynamics/ Numerical Techniques/ Applied Thermodynamics                                       | Introduction to Machine Learning for Engineers/ Control System Technology/ Applied Thermodynamics/ Introduction to Ocean Dynamics                                  | Applied Thermodynamics/ Introduction to Machine Learning for Engineers/ Introduction to Ocean Dynamics/ Microcontrollers and Embedded Systems                                        | Construction Planning and Management/ Microcontrollers and Embedded Systems/ Introduction to Ocean Dynamics/ Applied Thermodynamics/ Introduction to Machine Learning for Engineers | Introduction to Machine Learning for Engineers/ Introduction to Ocean Dynamics/ Construction Planning and Management/ Microcontrollers and Embedded Systems/ Numerical Techniques/ Control System Technology | Construction Planning and Management/ Introduction to Machine Learning for Engineers/ Microcontrollers and Embedded Systems/ Numerical Techniques/ Introduction to Ocean Dynamics | Introduction to Ocean Dynamics/ Numerical Techniques/ Construction Planning and Management/ Introduction to Machine Learning for Engineers | Construction Planning and Management/ Numerical Techniques/ Microcontrollers and Embedded Systems/ Introduction to Ocean Dynamics/ Introduction to Machine Learning for Engineers |
| 26-11-2024<br>Tuesday         | Phase transformation of materials                                                                                                   | Water Resources Engineering                                                                                        | Water Resources Engineering                                                                                                                                        | Water Resources Engineering                                                                                                                                                          | Measurement and Instrumentation                                                                                                                                                     | -                                                                                                                                                                                                            | Systems & Control                                                                                                                                                                 | Systems & Control                                                                                                                          | Systems & Control                                                                                                                                                                 |
| 27-11-2024<br>Wednesday       | Managerial Economics/ Fiction and Social Change/ Psychology of Well-being/ Introduction to Indian Philosophy                        | Introduction to Indian Philosophy/ Fiction and Social Change/ Dimensions of Creativity: Indian Writings in English | Psychology of Well-being/ Fiction and Social Change/ Managerial Economics/ Introduction to Indian Philosophy/ Dimensions of Creativity: Indian Writings in English | Introduction to Indian Philosophy/ Ethics and Epics/ Dimensions of Creativity: Indian Writings in English/ Fiction and Social Change/ Psychology of Well-being/ Managerial Economics | Managerial Economics/ Environomics/ Ethics and Epics/ Fiction and Social Change/ Psychology of Well-being/ Introduction to Indian Philosophy                                        | Dimensions of Creativity: Indian Writings in English/ Managerial Economics/ Environomics/ Fiction and Social Change/ Psychology of Well-being                                                                | -                                                                                                                                                                                 | -                                                                                                                                          | -                                                                                                                                                                                 |
| 2:30 PM - 5:30 PM (Afternoon) |                                                                                                                                     |                                                                                                                    |                                                                                                                                                                    |                                                                                                                                                                                      |                                                                                                                                                                                     |                                                                                                                                                                                                              |                                                                                                                                                                                   |                                                                                                                                            |                                                                                                                                                                                   |
| 20-11-2024<br>Wednesday       | -                                                                                                                                   | -                                                                                                                  | -                                                                                                                                                                  | -                                                                                                                                                                                    | -                                                                                                                                                                                   | Operating Systems                                                                                                                                                                                            | -                                                                                                                                                                                 | -                                                                                                                                          | -                                                                                                                                                                                 |



**Indian Institute of Technology Bhubaneswar**  
**Autumn End-Semester Examination - 2024-25(Centrally Planned Subjects)**  
**Dual Degree ( Semester-7 )**

| Date / Day                            | B.Tech. in Civil Engineering and M.Tech. in Environmental Engineering | B.Tech. in Mechanical Engineering and M.Tech. in Manufacturing Engineering                                 | B.Tech. in Civil Engineering and M.Tech. in Structural Engineering | B.Tech. in Metallurgical and Materials Engineering and M.Tech. in Metallurgical and Materials Engineering | B.Tech. in Civil Engineering and M.Tech. in Transportation Engineering | B.Tech. in Mechanical Engineering and M.Tech. in Thermal Science and Engineering | B.Tech. in Mechanical Engineering and M.Tech. in Mechanical Systems Design | B.Tech. in Electrical Engineering and M.Tech. in Power Electronics and Drives | B.Tech. in Computer Science and Engineering and M.Tech. in Computer Science and Engineering |
|---------------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| <b>09:30 AM - 12:30 PM (Forenoon)</b> |                                                                       |                                                                                                            |                                                                    |                                                                                                           |                                                                        |                                                                                  |                                                                            |                                                                               |                                                                                             |
| 19-11-2024<br>Tuesday                 | Dynamics of Linear Systems                                            | -                                                                                                          | -                                                                  | -                                                                                                         | -                                                                      | -                                                                                | -                                                                          | -                                                                             | -                                                                                           |
| 26-11-2024<br>Tuesday                 | -                                                                     | Advanced Manufacturing Processes-I                                                                         | -                                                                  | -                                                                                                         | -                                                                      | -                                                                                | -                                                                          | -                                                                             | -                                                                                           |
| <b>2:30 PM - 5:30 PM (Afternoon)</b>  |                                                                       |                                                                                                            |                                                                    |                                                                                                           |                                                                        |                                                                                  |                                                                            |                                                                               |                                                                                             |
| 18-11-2024<br>Monday                  | -                                                                     | -                                                                                                          | Advanced Structural Analysis                                       | Light metals and alloys                                                                                   | Pavement Material Characterization                                     | Advanced Manufacturing Processes                                                 | Advanced Manufacturing Processes                                           | Theory and Analysis of Electric Drives                                        | Compiler Design                                                                             |
| 19-11-2024<br>Tuesday                 | -                                                                     | Applied Probability and Linear Algebra/ Engineering Design Optimization/ Precision and Micro Manufacturing | -                                                                  | Polymers and nanocomposites                                                                               | Applied Probability and Linear Algebra                                 | Applied Probability and Linear Algebra                                           | Precision and Micro Manufacturing/ Engineering Design Optimization         | -                                                                             | -                                                                                           |
| 20-11-2024<br>Wednesday               | -                                                                     | -                                                                                                          | -                                                                  | -                                                                                                         | Urban Transportation Planning                                          | -                                                                                | -                                                                          | -                                                                             | Introduction to Machine Learning                                                            |

|                         |                                                                                   |                                                                         |                                                                                  |                             |                                                                                                           |                                                                                                                           |                                                                                                           |                                |                                 |
|-------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|--------------------------------|---------------------------------|
| 21-11-2024<br>Thursday  | -                                                                                 | Computer Aided Design and Manufacturing                                 | Data Intensive Computations                                                      | Data Intensive Computations | Infrastructure Maintenance and Rehabilitation                                                             | Data Intensive Computations/<br>Computer Aided Design and Manufacturing/<br>Infrastructure Maintenance and Rehabilitation | Computer Aided Design and Manufacturing                                                                   | -                              | -                               |
| 22-11-2024<br>Friday    | -                                                                                 | -                                                                       | -                                                                                | -                           | -                                                                                                         | -                                                                                                                         | -                                                                                                         | Switched Mode Power Conversion | Networks and Systems Security   |
| 23-11-2024<br>Saturday  | Surface Hydrology                                                                 | Machining Science                                                       | -                                                                                | -                           | Advanced Transportation Engineering                                                                       | Computational Methods in Thermal & Fluid Engineering                                                                      | -                                                                                                         | -                              | Mathematical Foundations of AI  |
| 25-11-2024<br>Monday    | -                                                                                 | -                                                                       | -                                                                                | -                           | -                                                                                                         | -                                                                                                                         | -                                                                                                         | Renewable Energy Systems       | Advanced Algorithms             |
| 26-11-2024<br>Tuesday   | -                                                                                 | -                                                                       | -                                                                                | -                           | -                                                                                                         | -                                                                                                                         | -                                                                                                         | Digital Control Systems        | -                               |
| 27-11-2024<br>Wednesday | Understanding Human Behaviour/<br>Global Communication/<br>Emotional Intelligence | Global Communication/<br>Emotional Intelligence/<br>Film and Philosophy | Understanding Human Behaviour/<br>Film and Philosophy/<br>Emotional Intelligence | Materials Characterization  | Film and Philosophy/<br>Understanding Human Behaviour/<br>Emotional Intelligence/<br>Global Communication | Understanding Human Behaviour/<br>Film and Philosophy/<br>Emotional Intelligence/<br>Global Communication                 | Emotional Intelligence/<br>Understanding Human Behaviour/<br>Global Communication/<br>Film and Philosophy | -                              | Artificial Intelligence Systems |



**Indian Institute of Technology Bhubaneswar**  
**Autumn End-Semester Examination - 2024-25(Centrally Planned Subjects)**  
**Dual Degree ( Semester-9 )**

| Date / Day                            | B.Tech. in Electrical Engineering and M.Tech. in Power Electronics and Drives | B.Tech. in Mechanical Engineering and M.Tech. in Mechanical Systems Design | B.Tech. in Metallurgical and Materials Engineering and M.Tech. in Metallurgical and Materials Engineering | B.Tech. in Mechanical Engineering and M.Tech. in Manufacturing Engineering | B.Tech. in Civil Engineering and M.Tech. in Structural Engineering | B.Tech. in Mechanical Engineering and M.Tech. in Thermal Science and Engineering | B.Tech. in Civil Engineering and M.Tech. in Environmental Engineering | B.Tech. in Computer Science and Engineering and M.Tech. in Computer Science and Engineering | B.Tech. in Civil Engineering and M.Tech. in Transportation Engineering |
|---------------------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| <b>09:30 AM - 12:30 PM (Forenoon)</b> |                                                                               |                                                                            |                                                                                                           |                                                                            |                                                                    |                                                                                  |                                                                       |                                                                                             |                                                                        |
| 18-11-2024<br>Monday                  | Optical Communication                                                         | Fracture Mechanics                                                         | Advanced Thermodynamics and Kinetics                                                                      | Surface Engineering                                                        | -                                                                  | -                                                                                | -                                                                     | -                                                                                           | -                                                                      |
| 19-11-2024<br>Tuesday                 | -                                                                             | -                                                                          | Materials Processing                                                                                      | Lasers in Manufacturing                                                    | Theory of Plates & Shells                                          | -                                                                                | -                                                                     | -                                                                                           | -                                                                      |
| <b>2:30 PM - 5:30 PM (Afternoon)</b>  |                                                                               |                                                                            |                                                                                                           |                                                                            |                                                                    |                                                                                  |                                                                       |                                                                                             |                                                                        |
| 18-11-2024<br>Monday                  | -                                                                             | -                                                                          | -                                                                                                         | -                                                                          | -                                                                  | Combustion & Emissions                                                           | Solid Waste Management                                                | -                                                                                           | -                                                                      |
| 19-11-2024<br>Tuesday                 | Electric Power Quality                                                        | Engineering Design Optimization                                            | -                                                                                                         | Precision and Micro Manufacturing                                          | -                                                                  | -                                                                                | -                                                                     | -                                                                                           | -                                                                      |
| 20-11-2024<br>Wednesday               | Introduction to Machine Learning                                              | -                                                                          | -                                                                                                         | -                                                                          | -                                                                  | -                                                                                | -                                                                     | Introduction to Machine Learning                                                            | -                                                                      |
| 21-11-2024<br>Thursday                | -                                                                             | -                                                                          | -                                                                                                         | -                                                                          | Infrastructure Maintenance and Rehabilitation                      | -                                                                                | -                                                                     | Data Intensive Computations                                                                 | Infrastructure Maintenance and Rehabilitation                          |
| 22-11-2024<br>Friday                  | -                                                                             | -                                                                          | -                                                                                                         | -                                                                          | -                                                                  | -                                                                                | -                                                                     | -                                                                                           | Design of Transportation Facilities and Safety                         |
| 23-11-2024<br>Saturday                | Mathematical Foundations of AI/ High Voltage Engineering                      | -                                                                          | -                                                                                                         | -                                                                          | -                                                                  | -                                                                                | -                                                                     | Mathematical Foundations of AI                                                              | -                                                                      |
| 26-11-2024<br>Tuesday                 | -                                                                             | Theory of Plasticity                                                       | -                                                                                                         | -                                                                          | -                                                                  | Gas Turbine & Jet Propulsion                                                     | -                                                                     | -                                                                                           | -                                                                      |

|                         |   |   |   |   |   |   |   |                                       |   |
|-------------------------|---|---|---|---|---|---|---|---------------------------------------|---|
| 27-11-2024<br>Wednesday | - | - | - | - | - | - | - | Artificial<br>Intelligence<br>Systems | - |
|-------------------------|---|---|---|---|---|---|---|---------------------------------------|---|



**Indian Institute of Technology Bhubaneswar**  
**Autumn End-Semester Examination - 2024-25(Centrally Planned Subjects)**  
**MS(R) ( Semester-1 )**

| Date / Day                           | Computer Science & Engineering   |
|--------------------------------------|----------------------------------|
| <b>2:30 PM - 5:30 PM (Afternoon)</b> |                                  |
| 20-11-2024<br>Wednesday              | Introduction to Machine Learning |
| 23-11-2024<br>Saturday               | Mathematical Foundations of AI   |
| 27-11-2024<br>Wednesday              | Artificial Intelligence Systems  |



**Indian Institute of Technology Bhubaneswar**  
**Autumn End-Semester Examination - 2024-25(Centrally Planned Subjects)**  
**MS(R) ( Semester-2 )**

| Date / Day                            | Mechanical                         | Computer Science & Engineering  |
|---------------------------------------|------------------------------------|---------------------------------|
| <b>09:30 AM - 12:30 PM (Forenoon)</b> |                                    |                                 |
| 21-11-2024<br>Thursday                | Scientific and Technical Writing   | -                               |
| 26-11-2024<br>Tuesday                 | Advanced Manufacturing Processes-I | -                               |
| <b>2:30 PM - 5:30 PM (Afternoon)</b>  |                                    |                                 |
| 23-11-2024<br>Saturday                | -                                  | Mathematical Foundations of AI  |
| 27-11-2024<br>Wednesday               | -                                  | Artificial Intelligence Systems |



**Indian Institute of Technology Bhubaneswar**  
**Autumn End-Semester Examination - 2024-25(Centrally Planned Subjects)**  
**B.SC.-B.ED ( Semester-3 )**

| Date / Day                            | ITEP ECONOMICS<br>SECONDARY<br>STAGE OF 9<br>AND 10 -<br>MINOR IN<br>MATHEMATICS | ITEP MATHEMATICS<br>SECONDARY<br>STAGE OF 9<br>AND 10 -<br>MINOR IN<br>ECONOMICS | ITEP ECONOMICS<br>(B.Sc.-B.Ed.)              | ITEP CHEMISTRY<br>SECONDARY<br>STAGE OF 9<br>AND 10 -<br>MINOR IN<br>MATHEMATICS | ITEP CHEMISTRY<br>(B.Sc.-B.Ed.)              | ITEP PHYSICS<br>SECONDARY<br>STAGE OF 9<br>AND 10 -<br>MINOR IN<br>ECONOMICS | ITEP PHYSICS<br>(B.Sc.-B.Ed.)                | ITEP MATHEMATICS<br>(B.Sc.-B.Ed.)            | ITEP MATHEMATICS<br>SECONDARY<br>STAGE OF 9<br>AND 10 -<br>MINOR IN<br>PHYSICS | ITEP PHYSICS<br>SECONDARY<br>STAGE OF 9<br>AND 10 -<br>MINOR IN<br>MATHEMATICS |
|---------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------|------------------------------------------------------------------------------|----------------------------------------------|----------------------------------------------|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| <b>09:30 AM - 12:30 PM (Forenoon)</b> |                                                                                  |                                                                                  |                                              |                                                                                  |                                              |                                                                              |                                              |                                              |                                                                                |                                                                                |
| 18-11-2024<br>Monday                  | Public Economics                                                                 | Public Economics                                                                 | Public Economics                             | Organic Spectroscopy                                                             | Organic Spectroscopy                         | Public Economics                                                             | -                                            | -                                            | -                                                                              | -                                                                              |
| 19-11-2024<br>Tuesday                 | Development Economics                                                            | Development Economics                                                            | Development Economics                        | Thermodynamics and colligative Properties                                        | Thermodynamics and colligative Properties    | Development Economics                                                        | -                                            | -                                            | -                                                                              | -                                                                              |
| 21-11-2024<br>Thursday                | Child Development and Educational Psychology                                     | Child Development and Educational Psychology                                     | Child Development and Educational Psychology | Child Development and Educational Psychology                                     | Child Development and Educational Psychology | Child Development and Educational Psychology                                 | Child Development and Educational Psychology | Child Development and Educational Psychology | Child Development and Educational Psychology                                   | Child Development and Educational Psychology                                   |
| 22-11-2024<br>Friday                  | C-programming with LAB                                                           | C-programming with LAB                                                           | -                                            | C-programming with LAB                                                           | -                                            | -                                                                            | -                                            | C-programming with LAB                       | C-programming with LAB                                                         | C-programming with LAB                                                         |
| 23-11-2024<br>Saturday                | Pedagogy                                                                         | Pedagogy                                                                         | Pedagogy                                     | Pedagogy                                                                         | Pedagogy                                     | Pedagogy                                                                     | Pedagogy                                     | Pedagogy                                     | Pedagogy                                                                       | Pedagogy                                                                       |
| 25-11-2024<br>Monday                  | -                                                                                | -                                                                                | -                                            | -                                                                                | -                                            | Quantum Physics I                                                            | Quantum Physics I                            | -                                            | Quantum Physics I                                                              | Quantum Physics I                                                              |
| 26-11-2024<br>Tuesday                 | Statistics for Economics                                                         | -                                                                                | Statistics for Economics                     | -                                                                                | -                                            | Electromagnetic waves and Optics                                             | Electromagnetic waves and Optics             | -                                            | Electromagnetic waves and Optics                                               | Electromagnetic waves and Optics                                               |
| 27-11-2024<br>Wednesday               | -                                                                                | Discrete Mathematics                                                             | -                                            | -                                                                                | -                                            | -                                                                            | -                                            | Discrete Mathematics                         | Discrete Mathematics                                                           | -                                                                              |
| <b>2:30 PM - 5:30 PM (Afternoon)</b>  |                                                                                  |                                                                                  |                                              |                                                                                  |                                              |                                                                              |                                              |                                              |                                                                                |                                                                                |
| 20-11-2024<br>Wednesday               | -                                                                                | Differential Equation                                                            | -                                            | -                                                                                | -                                            | -                                                                            | -                                            | Differential Equation                        | Differential Equation                                                          | -                                                                              |



**Indian Institute of Technology Bhubaneswar**  
**Autumn End-Semester Examination - 2024-25(Centrally Planned Subjects)**  
**B.Tech. ( Semester-1 )**

| Date / Day                            | Electronics and Communication Engineering                                | Civil Engineering                                                        | Metallurgical and Materials Engineering                                  | Engineering Physics                                                      | Computer Science and Engineering                                         | Electrical Engineering                                                   | Mechanical Engineering                                                   |
|---------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------|
| <b>09:30 AM - 12:30 PM (Forenoon)</b> |                                                                          |                                                                          |                                                                          |                                                                          |                                                                          |                                                                          |                                                                          |
| 19-11-2024<br>Tuesday                 | Mathematics - I                                                          | Mathematics - I                                                          | Mathematics - I                                                          | Mathematics - I                                                          | Mathematics - I                                                          | Mathematics - I                                                          | Mathematics - I                                                          |
| 21-11-2024<br>Thursday                | Introduction to Programing and Data Structures/<br>Electrical Technology | Electrical Technology/<br>Introduction to Programing and Data Structures | Electrical Technology/<br>Introduction to Programing and Data Structures | Electrical Technology/<br>Introduction to Programing and Data Structures | Electrical Technology/<br>Introduction to Programing and Data Structures | Introduction to Programing and Data Structures/<br>Electrical Technology | Electrical Technology/<br>Introduction to Programing and Data Structures |
| 23-11-2024<br>Saturday                | English for Communication/<br>Mechanics                                  | English for Communication/<br>Mechanics                                  | Mechanics/<br>English for Communication                                  | English for Communication/<br>Mechanics                                  | English for Communication/<br>Mechanics                                  | Mechanics/<br>English for Communication                                  | Mechanics/<br>English for Communication                                  |
| 26-11-2024<br>Tuesday                 | Physics/<br>Chemistry                                                    | Chemistry/<br>Physics                                                    | Physics/<br>Chemistry                                                    | Physics/<br>Chemistry                                                    | Physics/<br>Chemistry                                                    | Physics/<br>Chemistry                                                    | Chemistry/<br>Physics                                                    |



**Indian Institute of Technology Bhubaneswar**  
**Autumn End-Semester Examination - 2024-25(Centrally Planned Subjects)**  
**B.Tech. ( Semester-2 )**

| Date / Day                            | Metallurgical and Materials Engineering                                  | Computer Science and Engineering                                         | Electronics and Communication Engineering | Electrical Engineering | Mechanical Engineering | Civil Engineering         |
|---------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------|-------------------------------------------|------------------------|------------------------|---------------------------|
| <b>09:30 AM - 12:30 PM (Forenoon)</b> |                                                                          |                                                                          |                                           |                        |                        |                           |
| 21-11-2024<br>Thursday                | Introduction to Programing and Data Structures/<br>Electrical Technology | Introduction to Programing and Data Structures/<br>Electrical Technology | Electrical Technology                     | Electrical Technology  | Electrical Technology  | Electrical Technology     |
| 23-11-2024<br>Saturday                | Mechanics                                                                | Mechanics                                                                | Mechanics                                 | Mechanics              | -                      | English for Communication |
| 26-11-2024<br>Tuesday                 | Physics                                                                  | -                                                                        | -                                         | Chemistry/<br>Physics  | -                      | -                         |



**Indian Institute of Technology Bhubaneswar**  
**Autumn End-Semester Examination - 2024-25(Centrally Planned Subjects)**  
**B.Tech. ( Semester-3 )**

| Date / Day                           | Civil Engineering                                 | Metallurgical and Materials Engineering                                                                                                                                                                                                                      | Electrical Engineering                                                                                                                                                                                                         | Electronics and Communication Engineering                                                                                                                                                                                                                    | Computer Science and Engineering                                                                                                                                                                                                                             | Mechanical Engineering                            |
|--------------------------------------|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| <b>2:30 PM - 5:30 PM (Afternoon)</b> |                                                   |                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                              |                                                   |
| 18-11-2024<br>Monday                 | Introduction to Bioscience and Technology         | Introduction to Bioscience and Technology                                                                                                                                                                                                                    | Introduction to Bioscience and Technology                                                                                                                                                                                      | Introduction to Bioscience and Technology                                                                                                                                                                                                                    | Introduction to Bioscience and Technology                                                                                                                                                                                                                    | Introduction to Bioscience and Technology         |
| 19-11-2024<br>Tuesday                | Surveying                                         | Numerical Methods                                                                                                                                                                                                                                            | Signals and Systems                                                                                                                                                                                                            | Signals and Systems                                                                                                                                                                                                                                          | Signals and Systems                                                                                                                                                                                                                                          | -                                                 |
| 20-11-2024<br>Wednesday              | Basic Electronics                                 | Basic Electronics                                                                                                                                                                                                                                            | Introduction to Electronics                                                                                                                                                                                                    | Introduction to Electronics                                                                                                                                                                                                                                  | Introduction to Electronics                                                                                                                                                                                                                                  | Basic Electronics                                 |
| 21-11-2024<br>Thursday               | -                                                 | Thermodynamics of Materials                                                                                                                                                                                                                                  | -                                                                                                                                                                                                                              | -                                                                                                                                                                                                                                                            | -                                                                                                                                                                                                                                                            | -                                                 |
| 22-11-2024<br>Friday                 | Introduction to Materials Science and Engineering | Introduction to Materials Science and Engineering                                                                                                                                                                                                            | Introduction to Materials Science and Engineering                                                                                                                                                                              | Introduction to Materials Science and Engineering                                                                                                                                                                                                            | Discrete Structures                                                                                                                                                                                                                                          | Introduction to Materials Science and Engineering |
| 23-11-2024<br>Saturday               | Solid Mechanics                                   | -                                                                                                                                                                                                                                                            | -                                                                                                                                                                                                                              | -                                                                                                                                                                                                                                                            | -                                                                                                                                                                                                                                                            | Fluid Mechanics                                   |
| 25-11-2024<br>Monday                 | Probability, Statistics & Stochastic Processes    | -                                                                                                                                                                                                                                                            | Probability, Statistics & Stochastic Processes                                                                                                                                                                                 | Probability, Statistics & Stochastic Processes                                                                                                                                                                                                               | -                                                                                                                                                                                                                                                            | -                                                 |
| 26-11-2024<br>Tuesday                | -                                                 | -                                                                                                                                                                                                                                                            | -                                                                                                                                                                                                                              | -                                                                                                                                                                                                                                                            | Data Structures                                                                                                                                                                                                                                              | Transform Calculus                                |
| 27-11-2024<br>Wednesday              | Introduction to Economics                         | Entrepreneurship and Small Business Management/<br>Speaking and Presentation/<br>Macroeconomics and Business Environment/<br>Critical Thinking/<br>Social Psychology/<br>Introduction to Economics/<br>International Business/<br>Introduction to Philosophy | Entrepreneurship and Small Business Management/<br>Macroeconomics and Business Environment/<br>Introduction to Philosophy/<br>International Business/<br>Introduction to Economics/<br>Critical Thinking/<br>Social Psychology | Macroeconomics and Business Environment/<br>Introduction to Philosophy/<br>Social Psychology/<br>International Business/<br>Speaking and Presentation/<br>Introduction to Economics/<br>Critical Thinking/<br>Entrepreneurship and Small Business Management | Introduction to Philosophy/<br>Social Psychology/<br>Entrepreneurship and Small Business Management/<br>Macroeconomics and Business Environment/<br>Speaking and Presentation/<br>International Business/<br>Critical Thinking/<br>Introduction to Economics | -                                                 |



**Indian Institute of Technology Bhubaneswar**  
**Autumn End-Semester Examination - 2024-25(Centrally Planned Subjects)**  
**B.Tech. ( Semester-5 )**

| Date / Day                            | Electrical Engineering                                                                                                                                                                                                   | Civil Engineering                                                                                                                                                                                             | Electronics and Communication Engineering                                                                                                                                      | Computer Science and Engineering                                                                                                                                                                                                                       | Metallurgical and Materials Engineering                                                                                                                                    | Mechanical Engineering                                                                                                                                                                        |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>09:30 AM - 12:30 PM (Forenoon)</b> |                                                                                                                                                                                                                          |                                                                                                                                                                                                               |                                                                                                                                                                                |                                                                                                                                                                                                                                                        |                                                                                                                                                                            |                                                                                                                                                                                               |
| 18-11-2024<br>Monday                  | Power Electronics                                                                                                                                                                                                        | Soil Mechanics                                                                                                                                                                                                | Digital Communication                                                                                                                                                          | Formal Languages and Automata Theory                                                                                                                                                                                                                   | Mineral processing                                                                                                                                                         | -                                                                                                                                                                                             |
| 19-11-2024<br>Tuesday                 | Electrical Power Transmission and Distribution                                                                                                                                                                           | -                                                                                                                                                                                                             | -                                                                                                                                                                              | -                                                                                                                                                                                                                                                      | -                                                                                                                                                                          | Heat Transfer                                                                                                                                                                                 |
| 21-11-2024<br>Thursday                | Product Design and Development                                                                                                                                                                                           | -                                                                                                                                                                                                             | -                                                                                                                                                                              | -                                                                                                                                                                                                                                                      | -                                                                                                                                                                          | Product Design and Development                                                                                                                                                                |
| 22-11-2024<br>Friday                  | -                                                                                                                                                                                                                        | Design of Reinforced Concrete Structures                                                                                                                                                                      | -                                                                                                                                                                              | Computer Organization and Architecture                                                                                                                                                                                                                 | Mechanical properties and testing of materials                                                                                                                             | -                                                                                                                                                                                             |
| 23-11-2024<br>Saturday                | Electromagnetic Field Theory                                                                                                                                                                                             | -                                                                                                                                                                                                             | -                                                                                                                                                                              | -                                                                                                                                                                                                                                                      | Corrosion and surface engineering                                                                                                                                          | -                                                                                                                                                                                             |
| 25-11-2024<br>Monday                  | Construction Planning and Management/<br>Microcontrollers and Embedded Systems/<br>Numerical Techniques/<br>Applied Thermodynamics/<br>Introduction to Machine Learning for Engineers/<br>Introduction to Ocean Dynamics | Microcontrollers and Embedded Systems/<br>Control System Technology/<br>Applied Thermodynamics/<br>Introduction to Machine Learning for Engineers/<br>Numerical Techniques/<br>Introduction to Ocean Dynamics | Introduction to Ocean Dynamics/<br>Applied Thermodynamics/<br>Numerical Techniques/<br>Construction Planning and Management/<br>Introduction to Machine Learning for Engineers | Control System Technology/<br>Applied Thermodynamics/<br>Microcontrollers and Embedded Systems/<br>Introduction to Ocean Dynamics/<br>Numerical Techniques/<br>Construction Planning and Management/<br>Introduction to Machine Learning for Engineers | Introduction to Ocean Dynamics/<br>Applied Thermodynamics/<br>Construction Planning and Management/<br>Microcontrollers and Embedded Systems/<br>Control System Technology | Numerical Techniques/<br>Introduction to Ocean Dynamics/<br>Microcontrollers and Embedded Systems/<br>Introduction to Machine Learning for Engineers/<br>Construction Planning and Management |
| 26-11-2024<br>Tuesday                 | Measurement and Instrumentation                                                                                                                                                                                          | Water Resources Engineering                                                                                                                                                                                   | Microprocessor and Microcontroller                                                                                                                                             | -                                                                                                                                                                                                                                                      | Phase transformation of materials                                                                                                                                          | Systems & Control                                                                                                                                                                             |

|                               |                                                                                                                                                                                                                            |                                                                                                                                                                                                                               |                                                                                                                                                                                                                               |                                                                                                                                                                                                                            |                                                                                                                                                                                                                            |   |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| 27-11-2024<br>Wednesday       | Ethics and Epics/<br>Managerial Economics/<br>Introduction to Indian<br>Philosophy/<br>Fiction and Social Change/<br>Psychology of Well-being/<br>Environomics/<br>Dimensions of Creativity:<br>Indian Writings in English | Environomics/<br>Fiction and Social<br>Change/<br>Ethics and Epics/<br>Dimensions of Creativity:<br>Indian Writings in English/<br>Managerial Economics/<br>Psychology of Well-being/<br>Introduction to Indian<br>Philosophy | Psychology of Well-being/<br>Managerial Economics/<br>Introduction to Indian<br>Philosophy/<br>Dimensions of Creativity:<br>Indian Writings in English/<br>Environomics/<br>Ethics and Epics/<br>Fiction and Social<br>Change | Environomics/<br>Introduction to Indian<br>Philosophy/<br>Fiction and Social Change/<br>Managerial Economics/<br>Ethics and Epics/<br>Psychology of Well-being/<br>Dimensions of Creativity:<br>Indian Writings in English | Environomics/<br>Psychology of Well-being/<br>Managerial Economics/<br>Dimensions of Creativity:<br>Indian Writings in English/<br>Introduction to Indian<br>Philosophy/<br>Fiction and Social Change/<br>Ethics and Epics | - |
| 2:30 PM - 5:30 PM (Afternoon) |                                                                                                                                                                                                                            |                                                                                                                                                                                                                               |                                                                                                                                                                                                                               |                                                                                                                                                                                                                            |                                                                                                                                                                                                                            |   |
| 20-11-2024<br>Wednesday       | -                                                                                                                                                                                                                          | -                                                                                                                                                                                                                             | -                                                                                                                                                                                                                             | Operating Systems                                                                                                                                                                                                          | -                                                                                                                                                                                                                          | - |
| 27-11-2024<br>Wednesday       | -                                                                                                                                                                                                                          | -                                                                                                                                                                                                                             | -                                                                                                                                                                                                                             | Global Communication                                                                                                                                                                                                       | -                                                                                                                                                                                                                          | - |



**Indian Institute of Technology Bhubaneswar**  
**Autumn End-Semester Examination - 2024-25(Centrally Planned Subjects)**  
**B.Tech. ( Semester-7 )**

| Date / Day                            | Electrical Engineering                                                                                             | Electronics and Communication Engineering                          | Civil Engineering                                                                                                | Computer Science and Engineering                                              | Mechanical Engineering                                                                                           | Metallurgical and Materials Engineering |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| <b>09:30 AM - 12:30 PM (Forenoon)</b> |                                                                                                                    |                                                                    |                                                                                                                  |                                                                               |                                                                                                                  |                                         |
| 18-11-2024<br>Monday                  | Optical Communication                                                                                              | Optical Communication                                              | -                                                                                                                | -                                                                             | -                                                                                                                | -                                       |
| 19-11-2024<br>Tuesday                 | Dynamics of Linear Systems                                                                                         | RF and Microwave Engineering                                       | Open Channel Flows/<br>Dynamics of Linear Systems                                                                | Dynamics of Linear Systems                                                    | -                                                                                                                | -                                       |
| <b>2:30 PM - 5:30 PM (Afternoon)</b>  |                                                                                                                    |                                                                    |                                                                                                                  |                                                                               |                                                                                                                  |                                         |
| 18-11-2024<br>Monday                  | Theory and Analysis of Electric Drives                                                                             | Semiconductor Device Modeling                                      | Pavement Material Characterization/<br>Advanced Structural Analysis/<br>Solid Waste Management                   | Compiler Design                                                               | Advanced Manufacturing Processes/<br>Combustion & Emissions                                                      | Light metals and alloys                 |
| 19-11-2024<br>Tuesday                 | Electric Power Quality/<br>Applied Probability and Linear Algebra                                                  | -                                                                  | Precision and Micro Manufacturing/<br>Applied Probability and Linear Algebra/<br>Engineering Design Optimization | Applied Probability and Linear Algebra/<br>Engineering Design Optimization    | Engineering Design Optimization/<br>Precision and Micro Manufacturing/<br>Applied Probability and Linear Algebra | Polymers and nanocomposites             |
| 20-11-2024<br>Wednesday               | Distribution System Engineering/<br>Introduction to Machine Learning                                               | Introduction to Machine Learning/<br>Information Theory and Coding | Urban Transportation Planning                                                                                    | Information Theory and Coding/<br>Introduction to Machine Learning            | -                                                                                                                | -                                       |
| 21-11-2024<br>Thursday                | Data Intensive Computations/<br>Modern Digital Signal Processing/<br>Infrastructure Maintenance and Rehabilitation | Data Intensive Computations/<br>Modern Digital Signal Processing   | Data Intensive Computations/<br>Infrastructure Maintenance and Rehabilitation                                    | Infrastructure Maintenance and Rehabilitation/<br>Data Intensive Computations | Data Intensive Computations/<br>Computer Aided Design and Manufacturing                                          | Data Intensive Computations             |
| 22-11-2024<br>Friday                  | Networks and Systems Security/<br>Switched Mode Power Conversion                                                   | Advanced Communication Engineering                                 | Design of Transportation Facilities and Safety                                                                   | Networks and Systems Security                                                 | Operations Management                                                                                            | -                                       |
| 23-11-2024<br>Saturday                | High Voltage Engineering/<br>Mathematical Foundations of AI                                                        | Mathematical Foundations of AI/<br>Analog CMOS VLSI Design         | Advanced Transportation Engineering/<br>Surface Hydrology                                                        | Mathematical Foundations of AI                                                | -                                                                                                                | -                                       |

|                         |                                    |                                         |                                                                                                              |                                    |                                                                                                              |   |
|-------------------------|------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------|------------------------------------|--------------------------------------------------------------------------------------------------------------|---|
| 25-11-2024<br>Monday    | Renewable Energy Systems           | Communication Networks<br>and Switching | Environmental<br>Geotechnology                                                                               | Advanced Algorithms                | -                                                                                                            | - |
| 26-11-2024<br>Tuesday   | Digital Control Systems            | -                                       | -                                                                                                            | Mathematical Methods               | Gas Turbine & Jet<br>Propulsion                                                                              | - |
| 27-11-2024<br>Wednesday | Artificial Intelligence<br>Systems | -                                       | Emotional Intelligence/<br>Film and Philosophy/<br>Global Communication/<br>Understanding Human<br>Behaviour | Artificial Intelligence<br>Systems | Global Communication/<br>Understanding Human<br>Behaviour/<br>Emotional Intelligence/<br>Film and Philosophy | - |



# Indian Institute of Technology Bhubaneswar

## Autumn End-Semester Examination - 2024-25(Centrally Planned Subjects)

### M.Tech. ( Semester-1 )

| Date / Day                            | Metallurgical and Materials Engineering | Mechanical Systems Design       | Signal Processing and Communication Engineering | Water Resources Engineering                                  | Geotechnical Engineering | Manufacturing Engineering          | Structural Engineering       | Environmental Engineering       | Power Electronics and Drives                                      | Climate Science and Technology                               | Power System Engineering                 | Semiconductor Technology and Chip Design | Integrated Circuits and VLSI Systems | Transportation Engineering                     | Thermal Science and Engineering                      | Robotics and Artificial Intelligence                                    | Artificial Intelligence          | Computer Science and Engineering |
|---------------------------------------|-----------------------------------------|---------------------------------|-------------------------------------------------|--------------------------------------------------------------|--------------------------|------------------------------------|------------------------------|---------------------------------|-------------------------------------------------------------------|--------------------------------------------------------------|------------------------------------------|------------------------------------------|--------------------------------------|------------------------------------------------|------------------------------------------------------|-------------------------------------------------------------------------|----------------------------------|----------------------------------|
| <b>09:30 AM - 12:30 PM (Forenoon)</b> |                                         |                                 |                                                 |                                                              |                          |                                    |                              |                                 |                                                                   |                                                              |                                          |                                          |                                      |                                                |                                                      |                                                                         |                                  |                                  |
| 18-11-2024<br>Monday                  | Advanced Thermodynamics and Kinetics    | Fracture Mechanics              | Optical Communication                           | GIS & Remote Sensing Applications in Civil Engineering       | Applied Soil Mechanics   | Surface Engineering                | -                            | -                               | -                                                                 | -                                                            | -                                        | -                                        | -                                    | -                                              | -                                                    | -                                                                       | -                                | -                                |
| 19-11-2024<br>Tuesday                 | Materials Processing                    | -                               | -                                               | Open Channel Flows                                           | -                        | Lasers in Manufacturing            | Theory of Plates & Shells    | Atmospheric Chemistry & Aerosol | -                                                                 | -                                                            | -                                        | -                                        | -                                    | -                                              | -                                                    | -                                                                       | -                                | -                                |
| 21-11-2024<br>Thursday                | Principles of Materials Engineering     | -                               | -                                               | Mathematical and Statistical Methods in Earth System Science | -                        | -                                  | -                            | -                               | Power System Analysis and Operation                               | Mathematical and Statistical Methods in Earth System Science | Power System Analysis and Operation      | -                                        | -                                    | -                                              | -                                                    | -                                                                       | -                                | -                                |
| 25-11-2024<br>Monday                  | -                                       | -                               | Digital CMOS VLSI Design                        | -                                                            | -                        | -                                  | -                            | -                               | Renewable and Distributed Energy Sources                          | -                                                            | Renewable and Distributed Energy Sources | Digital CMOS VLSI Design                 | -                                    | -                                              | -                                                    | -                                                                       | -                                | -                                |
| 26-11-2024<br>Tuesday                 | -                                       | -                               | -                                               | -                                                            | -                        | Advanced Manufacturing Processes-I | -                            | -                               | -                                                                 | -                                                            | -                                        | -                                        | -                                    | -                                              | -                                                    | -                                                                       | -                                | -                                |
| <b>2:30 PM - 5:30 PM (Afternoon)</b>  |                                         |                                 |                                                 |                                                              |                          |                                    |                              |                                 |                                                                   |                                                              |                                          |                                          |                                      |                                                |                                                      |                                                                         |                                  |                                  |
| 18-11-2024<br>Monday                  | -                                       | -                               | -                                               | -                                                            | -                        | -                                  | Advanced Structural Analysis | Solid Waste Management          | Theory and Analysis of Electric Drives                            | -                                                            | Theory and Analysis of Electric Drives   | Semiconductor Device Modeling            | Semiconductor Device Modeling        | Pavement Material Characterization             | Combustion & Emissions                               | -                                                                       | -                                | -                                |
| 19-11-2024<br>Tuesday                 | -                                       | Engineering Design Optimization | Applied Probability and Linear Algebra          | -                                                            | -                        | Precision and Micro Manufacturing  | -                            | -                               | Electric Power Quality                                            | -                                                            | Electric Power Quality                   | -                                        | -                                    | -                                              | -                                                    | Engineering Design Optimization/ Applied Probability and Linear Algebra | -                                | -                                |
| 20-11-2024<br>Wednesday               | -                                       | -                               | Introduction to Machine Learning                | -                                                            | -                        | -                                  | -                            | -                               | Distribution System Engineering/ Introduction to Machine Learning | Introduction to Machine Learning                             | Distribution System Engineering          | -                                        | -                                    | Urban Transportation Planning                  | -                                                    | Introduction to Machine Learning                                        | Introduction to Machine Learning | Introduction to Machine Learning |
| 21-11-2024<br>Thursday                | -                                       | -                               | Modern Digital Signal Processing                | -                                                            | -                        | -                                  | -                            | -                               | Modern Digital Signal Processing                                  | -                                                            | -                                        | -                                        | -                                    | -                                              | -                                                    | -                                                                       | Data Intensive Computations      | -                                |
| 22-11-2024<br>Friday                  | -                                       | Operations Management           | Advanced Communication Engineering              | -                                                            | -                        | Operations Management              | -                            | -                               | Switched Mode Power Conversion                                    | -                                                            | Switched Mode Power Conversion           | -                                        | -                                    | Design of Transportation Facilities and Safety | -                                                    | -                                                                       | Networks and Systems Security    | Networks and Systems Security    |
| 23-11-2024<br>Saturday                | -                                       | -                               | Analog CMOS VLSI Design                         | Surface Hydrology                                            | -                        | Machining Science                  | -                            | -                               | Mathematical Foundations of AI/ High Voltage Engineering          | Mathematical Foundations of AI                               | Mathematical Foundations of AI           | Analog CMOS VLSI Design                  | -                                    | -                                              | Computational Methods in Thermal & Fluid Engineering | Mathematical Foundations of AI                                          | Mathematical Foundations of AI   | Mathematical Foundations of AI   |
| 25-11-2024<br>Monday                  | -                                       | -                               | -                                               | -                                                            | -                        | -                                  | -                            | -                               | -                                                                 | -                                                            | -                                        | -                                        | -                                    | -                                              | -                                                    | -                                                                       | Advanced Algorithms              | Advanced Algorithms              |

|                         |                            |                      |   |   |   |   |   |   |   |                      |   |   |   |   |                              |   |                                 |                                 |
|-------------------------|----------------------------|----------------------|---|---|---|---|---|---|---|----------------------|---|---|---|---|------------------------------|---|---------------------------------|---------------------------------|
| 26-11-2024<br>Tuesday   | Materials Design           | Theory of Plasticity | - | - | - | - | - | - | - | Mathematical Methods | - | - | - | - | Gas Turbine & Jet Propulsion | - | -                               | -                               |
| 27-11-2024<br>Wednesday | Materials Characterization | -                    | - | - | - | - | - | - | - | -                    | - | - | - | - | -                            | - | Artificial Intelligence Systems | Artificial Intelligence Systems |



**Indian Institute of Technology Bhubaneswar**  
**Autumn End-Semester Examination - 2024-25(Centrally Planned Subjects)**  
**M.Sc. ( Semester-1 )**

|                               |                                                         |               |
|-------------------------------|---------------------------------------------------------|---------------|
| Date / Day                    | Atmosphere and Ocean Sciences                           | Mathematics   |
| 2:30 PM - 5:30 PM (Afternoon) |                                                         |               |
| 18-11-2024<br>Monday          | Mathematical and Statistical Methods in Climate Science | Real Analysis |



**Indian Institute of Technology Bhubaneswar**  
**Autumn End-Semester Examination - 2024-25 (Centrally Planned Subjects)**  
**M.Sc. ( Semester-3 )**

| Date / Day                            | Geology             | Mathematics                                                       |
|---------------------------------------|---------------------|-------------------------------------------------------------------|
| <b>09:30 AM - 12:30 PM (Forenoon)</b> |                     |                                                                   |
| 19-11-2024<br>Tuesday                 | Advanced Glaciology | -                                                                 |
| <b>2:30 PM - 5:30 PM (Afternoon)</b>  |                     |                                                                   |
| 18-11-2024<br>Monday                  | -                   | Numerical Solution of Ordinary and Partial Differential Equations |



# Indian Institute of Technology Bhubaneswar

## Autumn End-Semester Examination - 2024-25(Centrally Planned Subjects)

### Ph.D.

| Date / Day                     | Water Resources Engineering                                                                                                | Electronics & Communication Engineering                            | Geology                                                                            | Geotechnical Engineering | English                                | Minerals Metallurgical and Materials Engineering          | Economics                              | Philosophy                          | NULL                                   | Mechanical                                                       | Atmosphere & Ocean Sciences                                  | Structural Engineering       | Electrical Engineering                                  | Psychology              | Mathematics                                                                                                                          | Chemistry                                                         | Physics                                                           | Computer Science & Engineering   | Transportation Engineering         | Environmental Engineering |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------|----------------------------------------|-----------------------------------------------------------|----------------------------------------|-------------------------------------|----------------------------------------|------------------------------------------------------------------|--------------------------------------------------------------|------------------------------|---------------------------------------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------|----------------------------------|------------------------------------|---------------------------|
| 09:30 AM - 12:30 PM (Forenoon) |                                                                                                                            |                                                                    |                                                                                    |                          |                                        |                                                           |                                        |                                     |                                        |                                                                  |                                                              |                              |                                                         |                         |                                                                                                                                      |                                                                   |                                                                   |                                  |                                    |                           |
| 18-11-2024<br>Monday           | GIS & Remote Sensing Applications in Civil Engineering                                                                     | Optical Communication                                              | Applied Coal Petrography & Coal Bed Methane/ Advanced Petrology                    | Applied Soil Mechanics   | Research Methodology and Data Analysis | Surface Engineering/ Advanced Thermodynamics and Kinetics | Research Methodology and Data Analysis | Perspectives in Indian Epistemology | Research Methodology and Data Analysis | Surface Engineering                                              | GIS & Remote Sensing Applications in Civil Engineering       | -                            | -                                                       | -                       | -                                                                                                                                    | -                                                                 | -                                                                 | -                                | -                                  | -                         |
| 19-11-2024<br>Tuesday          | -                                                                                                                          | RF and Microwave Engineering                                       | Advanced Glaciology                                                                | -                        | Contemporary World Literature          | Materials Processing                                      | -                                      | Contemporary World Literature       | Human Cognitive Process                | Lasers in Manufacturing                                          | Atmospheric Chemistry & Aerosol/ Advanced Glaciology         | Theory of Plates & Shells    | Dynamics of Linear Systems                              | Human Cognitive Process | Dynamics of Linear Systems                                                                                                           | -                                                                 | -                                                                 | -                                | -                                  | -                         |
| 21-11-2024<br>Thursday         | Mathematical and Statistical Methods in Earth System Science/ Mathematical and Statistical Methods in Earth System Science | -                                                                  | Scientific and Technical Writing                                                   | -                        | Scientific and Technical Writing       | Principles of Materials Engineering                       | Scientific and Technical Writing       | Scientific and Technical Writing    | Scientific and Technical Writing       | -                                                                | Mathematical and Statistical Methods in Earth System Science | -                            | Power System Analysis and Operation                     | -                       | -                                                                                                                                    | Scientific and Technical Writing                                  | Scientific and Technical Writing                                  | Scientific and Technical Writing | -                                  | -                         |
| 25-11-2024<br>Monday           | -                                                                                                                          | Digital CMOS VLSI Design                                           | -                                                                                  | -                        | -                                      | -                                                         | -                                      | -                                   | -                                      | -                                                                | -                                                            | -                            | Renewable and Distributed Energy Sources                | -                       | -                                                                                                                                    | -                                                                 | -                                                                 | -                                | -                                  | -                         |
| 26-11-2024<br>Tuesday          | -                                                                                                                          | -                                                                  | Mathematical & Computational Geosciences/ Mathematical & Computational Geosciences | -                        | Indian Writing in English (Fiction)    | -                                                         | -                                      | -                                   | -                                      | Advanced Manufacturing Processes-I                               | -                                                            | -                            | -                                                       | -                       | -                                                                                                                                    | -                                                                 | -                                                                 | -                                | -                                  | -                         |
| 2:30 PM - 5:30 PM (Afternoon)  |                                                                                                                            |                                                                    |                                                                                    |                          |                                        |                                                           |                                        |                                     |                                        |                                                                  |                                                              |                              |                                                         |                         |                                                                                                                                      |                                                                   |                                                                   |                                  |                                    |                           |
| 18-11-2024<br>Monday           | -                                                                                                                          | Semiconductor Device Modeling                                      | -                                                                                  | -                        | -                                      | -                                                         | -                                      | -                                   | -                                      | -                                                                | -                                                            | Advanced Structural Analysis | Theory and Analysis of Electric Drives                  | -                       | Numerical Solution of Ordinary and Partial Differential Equations/ Numerical Solution of Ordinary and Partial Differential Equations | Numerical Solution of Ordinary and Partial Differential Equations | Numerical Solution of Ordinary and Partial Differential Equations | -                                | Pavement Material Characterization | Solid Waste Management    |
| 19-11-2024<br>Tuesday          | -                                                                                                                          | Applied Probability and Linear Algebra                             | -                                                                                  | -                        | -                                      | -                                                         | -                                      | -                                   | -                                      | Engineering Design Optimization/ Engineering Design Optimization | -                                                            | -                            | Engineering Design Optimization/ Electric Power Quality | -                       | Applied Probability and Linear Algebra                                                                                               | -                                                                 | -                                                                 | -                                | -                                  | -                         |
| 20-11-2024<br>Wednesday        | -                                                                                                                          | Introduction to Machine Learning/ Introduction to Machine Learning | -                                                                                  | -                        | -                                      | -                                                         | -                                      | -                                   | -                                      | Introduction to Machine Learning                                 | -                                                            | -                            | Distribution System Engineering                         | -                       | -                                                                                                                                    | -                                                                 | Introduction to Machine Learning                                  | Introduction to Machine Learning | Urban Transportation Planning      | -                         |

|                         |   |                                                                     |                      |                                |   |                               |   |   |   |                                                                                                                                                                |   |   |   |   |                                                     |   |   |                                       |                                                        |   |
|-------------------------|---|---------------------------------------------------------------------|----------------------|--------------------------------|---|-------------------------------|---|---|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|-----------------------------------------------------|---|---|---------------------------------------|--------------------------------------------------------|---|
| 21-11-2024<br>Thursday  | - | Modern Digital<br>Signal<br>Processing                              | -                    | -                              | - | -                             | - | - | - | -                                                                                                                                                              | - | - | - | - | -                                                   | - | - | Data<br>Intensive<br>Computations     | Infrastructure<br>Maintenance<br>and<br>Rehabilitation | - |
| 22-11-2024<br>Friday    | - | Advanced<br>Communication<br>Engineering                            | -                    | -                              | - | -                             | - | - | - | -                                                                                                                                                              | - | - | - | - | -                                                   | - | - | Networks and<br>Systems<br>Security   | -                                                      | - |
| 23-11-2024<br>Saturday  | - | Mathematical<br>Foundations of<br>AI/<br>Analog CMOS<br>VLSI Design | Surface<br>Hydrology | -                              | - | -                             | - | - | - | Machining<br>Science/<br>Computational<br>Methods in<br>Thermal &<br>Fluid<br>Engineering/<br>Computational<br>Methods in<br>Thermal &<br>Fluid<br>Engineering | - | - | - | - | -                                                   | - | - | -                                     | -                                                      |   |
| 25-11-2024<br>Monday    | - | -                                                                   | -                    | Environmental<br>Geotechnology | - | -                             | - | - | - | -                                                                                                                                                              | - | - | - | - | -                                                   | - | - | Advanced<br>Algorithms                | -                                                      | - |
| 26-11-2024<br>Tuesday   | - | -                                                                   | -                    | -                              | - | Materials Design              | - | - | - | -                                                                                                                                                              | - | - | - | - | Mathematical<br>Methods/<br>Mathematical<br>Methods | - | - | -                                     | -                                                      | - |
| 27-11-2024<br>Wednesday | - | -                                                                   | -                    | Materials<br>Characterization  | - | Materials<br>Characterization | - | - | - | -                                                                                                                                                              | - | - | - | - | -                                                   | - | - | Artificial<br>Intelligence<br>Systems | -                                                      | - |