

**STUDY & EVALUATION SCHEME**  
**INTEGRATED B. TECH. +MBA: ELECTRICAL ENGINEERING**  
**II YEAR: III SEMESTER**

| S. NO.                            | SUBJECT CODE        | SUBJECT   | L         | T        | P        | CIE        | ESE        | TOTAL      | C         |
|-----------------------------------|---------------------|---|-----------|----------|----------|------------|------------|------------|-----------|
| <b>THEORY</b>                     |                     |   |           |          |          |            |            |            |           |
| 1                                 | BMA3001/<br>---     | Mathematics-III/<br>Science Based Open<br>Elective <sup>1</sup> | 3         | 2        | 0        | 40         | 60         | 100        | 4         |
| 2                                 | BHU3018/<br>BHU3019 | Organizational Psychology/<br>Organizational Sociology          | 2         | 0        | 0        | 40         | 60         | 100        | 2         |
| 3                                 | BEC3008             | Analog And Digital<br>Electronics                               | 3         | 2        | 0        | 40         | 60         | 100        | 4         |
| 4                                 | BME3004             | Basics of Thermodynamics  | 3         | 1        | 0        | 40         | 60         | 100        | 3         |
| 5                                 | BEE3001             | Network Analysis And<br>Synthesis                               | 3         | 2        | 0        | 40         | 60         | 100        | 4         |
| 6                                 | BEE3002             | Engineering Material  | 3         | 2        | 0        | 40         | 60         | 100        | 4         |
| <b>PRACTICAL/TRAINING/PROJECT</b> |                     |   |           |          |          |            |            |            |           |
| 7                                 | BEC3505             | Electronics Lab   | 0         | 0        | 2        | 80         | 20         | 100        | 1         |
| 8                                 | BEE3501             | Electrical Simulation Lab                                       | 0         | 0        | 2        | 80         | 20         | 100        | 1         |
| 9                                 | BEE3502             | Network Lab   | 0         | 0        | 2        | 80         | 20         | 100        | 1         |
| <b>TOTAL</b>                      |                     |   | <b>17</b> | <b>9</b> | <b>6</b> | <b>480</b> | <b>420</b> | <b>900</b> | <b>24</b> |

L - Lecture  
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**INTEGRATED B. TECH. +MBA: ELECTRICAL ENGINEERING**  
**II YEAR: IV SEMESTER**

| S. NO.                            | SUBJECT CODE        | SUBJECT   | L         | T        | P        | CIE        | ESE        | TOTAL      | C         |
|-----------------------------------|---------------------|---|-----------|----------|----------|------------|------------|------------|-----------|
| 1.                                | ---/<br>BMA4001     | Science Based Open ElectiveI <sup>1</sup> / Mathematics-III | 3         | 2        | 0        | 40         | 60         | 100        | 4         |
| 2.                                | BHU4019/<br>BHU4018 | Organizational Sociology / Organizational Psychology        | 2         | 0        | 0        | 40         | 60         | 100        | 2         |
| 3.                                | BEC4008             | Micro-Processor & Micro Controller                          | 3         | 1        | 0        | 40         | 60         | 100        | 3         |
| 4.                                | BEE4001             | EMMI  | 3         | 1        | 0        | 40         | 60         | 100        | 3         |
| 5.                                | BEE4002             | EMEC-I  | 3         | 2        | 0        | 40         | 60         | 100        | 4         |
| 6.                                | BEE4003             | Signal and system   | 3         | 2        | 0        | 40         | 60         | 100        | 4         |
| <b>PRACTICAL/TRAINING/PROJECT</b> |                     |   |           |          |          |            |            |            |           |
| 7.                                | BEC4506             | Micro-Processor Lab   | 0         | 0        | 2        | 80         | 20         | 100        | 1         |
| 8.                                | BEE4501             | Electrical Measurement Lab                                  | 0         | 0        | 2        | 80         | 20         | 100        | 1         |
| 9.                                | BEE4502             | EMEC-I Lab  | 0         | 0        | 2        | 80         | 20         | 100        | 1         |
| <b>TOTAL</b>                      |                     |   | <b>17</b> | <b>8</b> | <b>6</b> | <b>480</b> | <b>420</b> | <b>900</b> | <b>23</b> |

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**III YEAR: V SEMESTER**

| S. NO.                            | SUBJECT CODE        | SUBJECT   | L         | T        | P        | CIE        | ESE        | TOTAL      | C         |
|-----------------------------------|---------------------|---|-----------|----------|----------|------------|------------|------------|-----------|
| <b>THEORY</b>                     |                     |   |           |          |          |            |            |            |           |
| 1.                                | BMG5006/<br>BMG5007 | Engineering and Managerial Economics / Principles of Management | 3         | 0        | 0        | 40         | 60         | 100        | 3         |
| 2.                                | BEE5001             | EMEC-II   | 3         | 2        | 0        | 40         | 60         | 100        | 4         |
| 3.                                | BEE5002             | Control system  | 3         | 2        | 0        | 40         | 60         | 100        | 4         |
| 4.                                | BEE5003             | Electrical Instrumentation and Process Control                  | 3         | 0        | 0        | 40         | 60         | 100        | 3         |
| 5.                                | BEE5004             | Fundamentals of EM Field Theory                                 | 3         | 2        | 0        | 40         | 60         | 100        | 4         |
| 6.                                | BEE5005             | Element of Power System   | 3         | 2        | 0        | 40         | 60         | 100        | 4         |
| <b>PRACTICAL/TRAINING/PROJECT</b> |                     |   |           |          |          |            |            |            |           |
| 7.                                | BEE5501             | EMEC-II Lab   | 0         | 0        | 2        | 80         | 20         | 100        | 1         |
| 8.                                | BEE5502             | Control Lab   | 0         | 0        | 2        | 80         | 20         | 100        | 1         |
| 9.                                | BEE5503             | Instrumentation Lab   | 0         | 0        | 2        | 80         | 20         | 100        | 1         |
| <b>TOTAL</b>                      |                     |   | <b>18</b> | <b>8</b> | <b>6</b> | <b>480</b> | <b>420</b> | <b>900</b> | <b>25</b> |

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**III YEAR: VI SEMESTER**

| S. NO.                            | SUBJECT CODE        | SUBJECT  | L         | T        | P        | CIE        | ESE        | TOTAL       | C         |
|-----------------------------------|---------------------|--|-----------|----------|----------|------------|------------|-------------|-----------|
| <b>THEORY</b>                     |                     |  |           |          |          |            |            |             |           |
| 1.                                | BMG6006/<br>BMG6007 | Engineering and Managerial Economics/ Principles of Management | 3         | 0        | 0        | 40         | 60         | 100         | 3         |
| 2.                                | BEC6008             | Communication Engineering                                      | 3         | 0        | 0        | 40         | 60         | 100         | 3         |
| 3.                                | BEE6001             | Power Electronics  | 3         | 2        | 0        | 40         | 60         | 100         | 4         |
| 4.                                | BEE6002             | Power System Analysis  | 3         | 2        | 0        | 40         | 60         | 100         | 4         |
| 5.                                | BEE6003             | Power System Operation & Control                               | 3         | 2        | 0        | 40         | 60         | 100         | 4         |
| 6.                                | ---                 | Department Elective-I  | 3         | 1        | 0        | 40         | 60         | 100         | 3         |
| <b>PRACTICAL/TRAINING/PROJECT</b> |                     |  |           |          |          |            |            |             |           |
| 7.                                | BEC6508             | Communication Engineering Lab                                  | 0         | 0        | 2        | 80         | 20         | 100         | 1         |
| 8.                                | BEE6501             | Power Electronics Lab  | 0         | 0        | 2        | 80         | 20         | 100         | 1         |
| 9.                                | BEE6502             | Seminar  | 0         | 0        | 2        | 100        | -          | 100         | 1         |
| 10.                               | BEE6503             | Industrial Visit   | 0         | 0        | 0        | 100        | -          | 100         | 1         |
| <b>TOTAL</b>                      |                     |  | <b>18</b> | <b>7</b> | <b>6</b> | <b>600</b> | <b>400</b> | <b>1000</b> | <b>25</b> |

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**VI YEAR: VII SEMESTER**

| S. NO.                            | SUBJECT CODE | SUBJECT                        | L         | T        | P         | CIE        | ESE        | TOTAL      | C         |
|-----------------------------------|--------------|--------------------------------|-----------|----------|-----------|------------|------------|------------|-----------|
| <b>THEORY</b>                     |              |                                |           |          |           |            |            |            |           |
| 1.                                | BEE7001      | Electric Drives                | 3         | 2        | 0         | 40         | 60         | 100        | 4         |
| 2.                                | BEE7002      | Switch Gear and Protection     | 3         | 1        | 0         | 40         | 60         | 100        | 3         |
| 3.                                | BEE7003      | High Voltage Technique         | 3         | 2        | 0         | 40         | 60         | 100        | 4         |
| 4.                                | MST7001      | Statistics for Decision Making | 3         | 1        | 0         | 40         | 60         | 100        | 3         |
| 5.                                | MMG7001      | Marketing Management-I         | 3         | 1        | 0         | 40         | 60         | 100        | 3         |
| 6.                                | MMG7002      | Business Issues                | 3         | 1        | 0         | 40         | 60         | 100        | 3         |
| <b>PRACTICAL/TRAINING/PROJECT</b> |              |                                |           |          |           |            |            |            |           |
| 7.                                | BEE7501      | Electric Drives Lab            | 0         | 0        | 2         | 80         | 20         | 100        | 1         |
| 8.                                | MEE7502      | Engineering Design Project     | 0         | 0        | 6         | 80         | 20         | 100        | 3         |
| 9.                                | BEE7503      | Summer Training                | 0         | 0        | 2         | 100        | -          | 100        | 1         |
| <b>TOTAL</b>                      |              |                                | <b>18</b> | <b>8</b> | <b>10</b> | <b>500</b> | <b>400</b> | <b>900</b> | <b>25</b> |

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**VI YEAR: VIII SEMESTER**

| S. NO.                            | SUBJECT CODE | SUBJECT                                       | L         | T        | P        | CIE        | ESE        | TOTAL      | C         |
|-----------------------------------|--------------|---|-----------|----------|----------|------------|------------|------------|-----------|
| <b>THEORY</b>                     |              |   |           |          |          |            |            |            |           |
| 1                                 | MMG8001      | Research Methodology                          | 3         | 1        | 0        | 40         | 60         | 100        | 3         |
| 2                                 | MMG8002      | Human Resource Management                     | 3         | 1        | 0        | 40         | 60         | 100        | 3         |
| 3                                 | MCM8001      | Financial Management                          | 3         | 1        | 0        | 40         | 60         | 100        | 3         |
| 4                                 | MMG8003      | Marketing Management -II                      | 3         | 1        | 0        | 40         | 60         | 100        | 3         |
| 5                                 | MMG8004      | Production and Operations Management          | 3         | 1        | 0        | 40         | 60         | 100        | 3         |
| 6                                 | BEE8001      | Utilization of Electrical Energy and Traction | 3         | 2        | 0        | 40         | 60         | 100        | 4         |
| <b>PRACTICAL/TRAINING/PROJECT</b> |              |   |           |          |          |            |            |            |           |
| 7                                 | MMG8501      | Computer Statistical Tool (SPSS )             | -         | -        | 4        | 80         | 20         | 100        | 2         |
| 8                                 | MEE8502      | Integrated Project Part-I                     | 0         | 0        | 4        | 80         | 20         | 100        | 2         |
| <b>TOTAL</b>                      |              |   | <b>18</b> | <b>7</b> | <b>8</b> | <b>400</b> | <b>400</b> | <b>800</b> | <b>23</b> |

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**STUDY & EVALUATION SCHEME**  
**INTEGRATED B. TECH. +MBA: ELECTRICAL ENGINEERING**  
**V YEAR: IX SEMESTER**

| S. NO.                            | SUBJECT CODE | SUBJECT  | L         | T        | P        | CIE        | ESE        | TOTAL      | C         |
|-----------------------------------|--------------|--|-----------|----------|----------|------------|------------|------------|-----------|
| <b>THEORY</b>                     |              |  |           |          |          |            |            |            |           |
| 1                                 | MCS9001      | Management Information Systems & Internet Technologies | 3         | 1        | -        | 40         | 60         | 100        | 3         |
| 2                                 | MMG9001      | Corporate Governance & Business Ethics                 | 3         | 1        | -        | 40         | 60         | 100        | 3         |
| 3                                 | MMG9002      | Entrepreneurship                                       | 3         | 1        | -        | 40         | 60         | 100        | 3         |
| 4                                 | MCM9001      | Accountancy- Foundation Course                         | 3         | 1        | -        | 40         | 60         | 100        | 3         |
| 5                                 | MMG9003      | Organizational Behavior, Leadership and Team work      | 3         | 1        | -        | 40         | 60         | 100        | 3         |
| 6                                 | ---          | Specialization-1: Paper 1                              | 3         | 1        | -        | 40         | 60         | 100        | 3         |
| 7                                 | ---          | Specialization-1: Paper 2                              | 3         | 1        | -        | 40         | 60         | 100        | 3         |
| <b>PRACTICAL/TRAINING/PROJECT</b> |              |  |           |          |          |            |            |            |           |
| 8                                 | MEE9503      | Integrated Project Part-II                             | -         | -        | 4        | 80         | 20         | 100        | 4         |
| 9                                 | MEE9504      | Summer Training - Project Report                       | 0         | 0        | 2        | 100        | -          | 100        | 1         |
| <b>TOTAL</b>                      |              |  | <b>21</b> | <b>7</b> | <b>6</b> | <b>460</b> | <b>440</b> | <b>900</b> | <b>26</b> |

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**V YEAR: X SEMESTER**

| S. NO.                            | SUBJECT CODE | SUBJECT  | L         | T        | P        | CIE        | ESE        | TOTAL      | C         |
|-----------------------------------|--------------|--|-----------|----------|----------|------------|------------|------------|-----------|
| <b>THEORY</b>                     |              |  |           |          |          |            |            |            |           |
| 1.                                | MMG0001      | Legal Aspects of Business                                      | 3         | 1        | -        | 40         | 60         | 100        | 3         |
| 2.                                | MMG9002      | Business Environment   | 3         | 1        | -        | 40         | 60         | 100        | 3         |
| 3.                                | MMG9003      | Strategic Management   | 3         | 1        | -        | 40         | 60         | 100        | 3         |
| 4.                                | ---          | Specialization-1: Paper 3                                      | 3         | 1        | -        | 40         | 60         | 100        | 3         |
| 5.                                | ---          | Specialization-1: Paper 4                                      | 3         | 1        | -        | 40         | 60         | 100        | 3         |
| <b>PRACTICAL/TRAINING/PROJECT</b> |              |  |           |          |          |            |            |            |           |
| 6.                                | MMG0501      | Entrepreneurship Lab-<br>(Launch a new business-micro project) | 0         | 0        | 2        | 80         | 20         | 100        | 2         |
| 7.                                | MEE0503      | Integrated Project Part-III                                    | 0         | 0        | 4        | 80         | 20         | 100        | 4         |
| 8.                                | MEE0502      | Comprehensive Viva   | 0         | 0        | 0        | 100        | 0          | 100        | 2         |
| <b>TOTAL</b>                      |              |  | <b>15</b> | <b>5</b> | <b>6</b> | <b>460</b> | <b>340</b> | <b>800</b> | <b>23</b> |

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## LIST OF ELECTIVES

| S. NO.                                | SUBJECT CODE    | SUBJECT NAME                      | SEMESTER               |
|---------------------------------------|-----------------|-----------------------------------|------------------------|
| <b>SCIENCE BASED OPEN ELECTIVES I</b> |                 |                                   |                        |
| 1                                     | BCY3301/BCY4301 | Industrial Chemical & Environment | <b>III/IV Semester</b> |
| 2                                     | BCY3302/BCY4302 | Polymer Technology                |                        |
| 3                                     | BMA3301/BMA4301 | Discrete Mathematics              |                        |
| 4                                     | BST3301/BST4301 | Statistical & Numerical Analysis  |                        |
| 5                                     | BPH3301/BPH4301 | Nano Science                      |                        |
| 6                                     | BPH3302/BPH4302 | Space Science                     |                        |
| <b>DEPARTMENT ELECTIVE-I</b>          |                 |                                   |                        |
| 1                                     | BEE6101         | Special Electrical Machine        | <b>VI Semester</b>     |
| 2                                     | BEE6102         | Digital control system            |                        |
| 3                                     | BEE6103         | Intelligent instrumentation       |                        |
| 4                                     | BCS6105         | Object oriented system and C++    |                        |

| <b>SPECIALIZATION: I</b>                             |                     |   |                 |
|--|---------------------|---|-----------------|
| <b>S. NO.</b>  | <b>SUBJECT CODE</b> | <b>SUBJECT</b>                                      | <b>SEMESTER</b> |
| <b>SPECIALIZATION GROUP : MARKETING</b>              |                     |   |                 |
| 1  | MMG9001-MK          | Sales and Distribution Management                   | IX Semester     |
| 2  | MMG9002-MK          | Marketing of Services                               | IX Semester     |
| 3  | MMG0001-MK          | Consumer Behavior & Customer Relationship Marketing | X Semester      |
| 4  | MMG0002-MK          | Retailing/ Mall Management                          | X Semester      |
| <b>SPECIALIZATION GROUP : FINANCE</b>                |                     |   |                 |
| 1  | MCM9001-FM          | Financial Institutions and Services                 | IX Semester     |
| 2  | MCM9002-FM          | Security Analysis and Portfolio Management          | IX Semester     |
| 3  | MCM0001-FM          | Taxation & Tax Planning                             | X Semester      |
| 4  | MCM0002-FM          | Financial Derivatives                               | X Semester      |
| <b>SPECIALIZATION GROUP : HUMAN RESOURCE</b>         |                     |   |                 |
| 1  | MMG9001-HR          | Employee Relations and Industrial Law               | IX Semester     |
| 2  | MMG9002-HR          | Performance Appraisal and Management                | IX Semester     |
| 3  | MMG0001-HR          | Managing Change in Organizations                    | X Semester      |
| 4  | MMG0002-HR          | Human Resource Planning                             | X Semester      |
| <b>SPECIALIZATION GROUP : OPERATIONS MANAGEMENT</b>  |                     |   |                 |
| 1  | MMG9001-OM          | Project Management                                  | IX Semester     |
| 2  | MMG9002-OM          | Production Planning and Control                     | IX Semester     |
| 3  | MMG0001-OM          | Operations Strategy (TQM, Environment Safety etc.)  | X Semester      |
| 4  | MMG0002-OM          | Supply Chain Modeling                               | X Semester      |
| <b>SPECIALIZATION GROUP : INFORMATION TECHNOLOGY</b> |                     |   |                 |
| 1  | MCS9001-IT          | ERP Systems: Technology Planning & Implementation   | IX Semester     |
| 2  | MCS9002-IT          | Software Project Management                         | IX Semester     |
| 3  | MCS0001-IT          | Network Application & Management                    | X Semester      |
| 4  | MCS0002-IT          | E-Commerce Technology                               | X Semester      |
| <b>SPECIALIZATION GROUP: INTERNATIONAL BUSINESS</b>  |                     |   |                 |
| 1  | MMG9001-IB          | International Marketing Management                  | IX Semester     |
| 2  | MMG9002-IB          | International Financial Management                  | IX Semester     |
| 3  | MMG0001-IB          | International Human Resource Management             | X Semester      |
| 4  | MMG0002-IB          | Export Management & Documentation                   | X Semester      |