

Thiagarajar College of Engineering
Department of Mechatronics Engineering
Percentage Revision of B.E., Mechatronics Engineering Curriculum 2014 - 2015

| Sl. No. | Course Code | Course Name | Change Details | % of Change | weightage |
|---------|-------------|---|----------------|-------------|-----------|
| 1 | 14MA110 | Engineering Mathematics -I | New | 100 | 1 |
| 2 | 14PH120 | Physics | New | 100 | 1 |
| 3 | 14CH130 | Chemistry | New | 100 | 1 |
| 4 | 14EG140 | English Communication | New | 100 | 1 |
| 5 | 14ES150 | Basics of Civil and Mechanical Engineering | New | 100 | 1 |
| 6 | 14ES160 | Basics of Electrical and Electronics Engineering | New | 100 | 1 |
| 7 | 14PH180 | Physics Lab | New | 100 | 1 |
| 8 | 14CH190 | Chemistry Lab | New | 100 | 1 |
| 9 | 14ME170 | Engineering Graphics | New | 100 | 1 |
| 10 | 14MT210 | Engineering Mathematics II | New | 100 | 1 |
| 11 | 14MT220 | Free Body Mechanics | New | 100 | 1 |
| 12 | 14MT230 | Electrical Machines | New | 100 | 1 |
| 13 | 14MT240 | Materials For Mechanical and Electronic Systems | New | 100 | 1 |
| 14 | 14MT250 | Environmental Science and Engineering | New | 100 | 1 |
| 15 | 14MT270 | Analog and Digital Devices | New | 100 | 1 |
| 16 | 14MT280 | Electrical Machines Lab | New | 100 | 1 |
| 17 | 14MT290 | Workshop | New | 100 | 1 |
| 18 | 14MT310 | Fourier Analysis and Partial Differential Equations | New | 100 | 1 |
| 19 | 14MT320 | Kinematics and Dynamics of Machinery | New | 100 | 1 |
| 20 | 14MT330 | Sensors and PLC | New | 100 | 1 |
| 21 | 14MT340 | Thermal Engineering and Fluid Mechanics | New | 100 | 1 |
| 22 | 14MT350 | Manufacturing Processes | New | 100 | 1 |
| 23 | 14MT370 | Problem solving using Computer | New | 100 | 1 |
| 24 | 14MT380 | Thermal Engineering Lab | New | 100 | 1 |
| 25 | 14MT390 | Manufacturing Processes Lab | New | 100 | 1 |
| 26 | 14MT410 | Linear algebra and Numerical Methods | New | 100 | 1 |
| 27 | 14MT420 | Engineering Design | New | 100 | 1 |
| 28 | 14MT430 | Analog and Digital Circuits Design | New | 100 | 1 |
| 29 | 14MT440 | Metrology and Measurements | New | 100 | 1 |
| 30 | 14MT450 | Fluid Power Automation | New | 100 | 1 |
| 31 | 14MT470 | Professional Communication | New | 100 | 1 |
| 32 | 14MT480 | Automation Lab | New | 100 | 1 |
| 33 | 14MT490 | Metrology and Measurement Lab | New | 100 | 1 |
| 34 | 14MT4C1 | Capstone Course –I | New | 100 | 1 |
| 35 | 14MT510 | Optimization Techniques | New | 100 | 1 |
| 36 | 14MT520 | Control Systems | New | 100 | 1 |
| 37 | 14MT530 | Power Electronics and Drives | New | 100 | 1 |
| 38 | 14MT540 | CNC Technology | New | 100 | 1 |
| 39 | 14MT570 | Microcontrollers | New | 100 | 1 |
| 40 | 14MT580 | CAD/CAM Lab | New | 100 | 1 |
| 41 | 14MT590 | Analog and Digital Circuit Design Lab | New | 100 | 1 |
| 42 | 14MT610 | Accounting and finance | New | 100 | 1 |
| 43 | 14MT620 | Industrial Robotics | New | 100 | 1 |
| 44 | 14MT630 | Mechatronic System Design | New | 100 | 1 |
| 45 | 14MT640 | Digital Signal Processing | New | 100 | 1 |
| 46 | 14MT680 | Dynamics and Control Lab | New | 100 | 1 |
| 47 | 14MT690 | Robotics Lab | New | 100 | 1 |
| 48 | 14MT710 | Project Management | New | 100 | 1 |
| 49 | 14MT720 | Unmanned Aerial Vehicles | New | 100 | 1 |
| 50 | 14MT770 | System Integration | New | 100 | 1 |
| 51 | 14MT7C0 | Capstone Course –II | New | 100 | 1 |

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| 52 | 14MT880 | Project | New | 100 | 1 |
| 53 | 14MAFA0 | Graph Theory | New | 100 | 1 |
| 54 | 14MAFB0 | Fuzzy Sets and Clustering | New | 100 | 1 |
| 55 | 14MAFC0 | Number Theory | New | 100 | 1 |
| 56 | 14MAFD0 | Mathematical Aptitude Methods | New | 100 | 1 |
| 57 | 14MAFE0 | Mathematical Techniques | New | 100 | 1 |
| 58 | 14PHFA0 | Smart Materials for Engineers | New | 100 | 1 |
| 59 | 14PHFB0 | Thin Film Technology | New | 100 | 1 |
| 60 | 14PHFC0 | Nanotechnology | New | 100 | 1 |
| 61 | 14PHFD0 | Quantum Computing | New | 100 | 1 |
| 62 | 14CHFA1 | Biology for Engineers | New | 100 | 1 |
| 63 | 14CHFB0 | Chemistry of Engineering Materials | New | 100 | 1 |
| 64 | 14CHFC0 | Battery Technologies | New | 100 | 1 |
| 65 | 14CHFD0 | Corrosion Science and Engineering | New | 100 | 1 |
| 66 | 14MTGA0 | Industrial Automation | New | 100 | 1 |
| 67 | 14MTGB0 | Mechatronics | New | 100 | 1 |
| 68 | 14MTGC0 | Total Quality management | New | 100 | 1 |
| 69 | 14MTGD0 | Sensors | New | 100 | 1 |
| 70 | 14MTPA0 | Machine Vision System | New | 100 | 1 |
| 71 | 14MTPB0 | Micro Electro Mechanical Systems | New | 100 | 1 |
| 72 | 14MTPC0 | Additive Manufacturing | New | 100 | 1 |
| 73 | 14MTPD0 | Integrated Product Development | New | 100 | 1 |
| 74 | 14MTPE0 | VERILOG HDL | New | 100 | 1 |
| 75 | 14MTPF0 | Total Quality management | New | 100 | 1 |
| 76 | 14MTPG0 | Smart materials for Mechatronics | New | 100 | 1 |
| 77 | 14MTPH0 | Embedded system | New | 100 | 1 |
| 78 | 14MTPJ0 | Programming for Robotics system | New | 100 | 1 |
| 79 | 14MTPK0 | Industrial Internet of Things | New | 100 | 1 |
| 80 | 14MTPM0 | Industrial Communication Networks | New | 100 | 1 |
| 81 | 14MTPN0 | Automotive Mechatronics | New | 100 | 1 |
| 82 | 14MTPP0 | Artificial Intelligence | New | 100 | 1 |
| 83 | 14MTPQ0 | Modern Control Systems | New | 100 | 1 |
| 84 | 14MTPR0 | Mechanical and Thermal Packaging of Electronics | New | 100 | 1 |
| 85 | 14MTPT0 | Data Analytics | New | 100 | 1 |
| 86 | 14MTPU0 | Mobile Robotics | New | 100 | 1 |
| 87 | 14MTPW0 | Virtual Instrumentation | New | 100 | 1 |
| 88 | 14MTPY0 | Design of Machine Elements | New | 100 | 1 |
| 89 | 14MTRA0 | Selection and Integration of Sensors | New | 100 | 1 |
| 90 | 14MT1C0 | Mobile Hydraulics | New | 100 | 1 |
| 91 | 14MT1D0 | Integrated building Management system | New | 100 | 1 |
| 92 | 14MT1E0 | EMI/EMC | New | 100 | 1 |
| 93 | 14MT1F0 | Bio-Mechatronics | New | 100 | 1 |
| 94 | 14MT2A0 | Reliability for Mechatronics System | New | 100 | 1 |
| 95 | 14MT1A0 | Elevator System Design | New | 100 | 1 |
| 96 | 14MT1A0 | Motion Logic Drives & Controls | New | 100 | 1 |

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| Total Weightage | 96 |
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| Total Change in % | 100.00 |
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