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| **No** | **Course Name** | **Course Code** | **Cr. Hrs**  (Lec+Tut+Lab) | **ECTS**  (Lec+Tut+  Lab+Home) | **Pre-requisite** | **Responsible**  **Chair/Department** | **Name of assigned Instructor** | **Assigned sections** | **Remark** |
| 1 | Probability and statistics for engineers | Stat 2041 | 3(2+3+0) | 4(2+3+0+2) | Math 1032 | Statistics Department |  |  |  |
| 2 | Applied Mathematics III | Math 2033 | 4 (3+3+0) | 6(3+3+0+6) | Math 1032 | Mathematics Department |  |  |  |
| 3 | Engineering materials II | MEng 2092 | 3(2+3+0) | 4(2+3+0+3) | MEng 1091 | ME chair |  |  |  |
| 4 | Strength of materials I | MEng 2061 | 3(2+3+0) | 5(2+3+0+5) | Math 1032, CEng 1051 | SMD Chair | Giramay Kesete  Shushay Aregawi | 1,2,3  4,5,6 |  |
| 5 | Engineering Thermodynamics I | MEng 2111 | 3(2+3+0) | 5(2+3+0+5) | Math 1032 | TES Chair |  |  |  |
| 6 | Fundamentals of electrical circuit | EEng 2151 | 2 (1+3+0) | 3(1+3+0+3) | None | School of Electrical & Computer Engineering |  |  |  |
| 7 | Computer programming for Engineers | Comp 2171 | 3(1+6+0) | 5(1+6+0+3) | None | School of Computing |  |  |  |
|  | **Total Semester load** | | **21 Cr. Hrs** | **32 ECTS** |

**Year II Semester I (Advisor: Mr. Tadesse Gebray) (6 Sections)**

**Year III Semester I (Advisor: Mr. Zina Gebrehiwot) (6 Sections)**

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| **No** | **Course Name** | **Course Code** | **Cr. Hrs**  (Lec+Tut+Lab) | **ECTS**  (Lec+Tut+  Lab+Home) | **Pre-requisite** | **Responsible**  **Chair/Department** | **Name of assigned Instructor** | **Assigned Sections** | **Remark** |
|  | Machine Drawing with CAD | MEng 3083 | 3(1+6+0) | 5(1+6+0+3) | MEng 2082 | SMD Chair | Tadese Gebray  Mewael G.hiowt | 1,2,3  4,5,6 |  |
|  | Machine Element I | MEng 3063 | 3(2+3+0) | 5(2+3+0+5) | MEng 2062 | SMD Chair | Ekubamariam Leake  Besufekad Getachew | 1,2,3  4,5,6 |  |
|  | Fluid Mechanics II | MEng 2122 | 3(2+3+0) | 5(2+3+0+5) | MEng 2121 | TES Chair |  |  |  |
|  | Numerical Methods for Engineers | MEng 3071 | 3(2+0+3) | 5(2+0+3+5) | Math 2033, Comp 2171 | IAC Chair |  |  |  |
|  | Foundry and Powder Metallurgy | MEng 3103 | 2(0+0+6) | 2(2+0+0+2) | None | ME chair |  |  |  |
|  | Fluid power systems | MEng 3123 | 3 (2+3+0) | 5(2+3+0+5) | MEng 2121, MEng 2082 | TES Chair |  |  |  |
|  | Electrical Machines and Drives | EEng 3153 | 3(2+3+0) | 4(2+3+0+3) | EEng 2152 | School of Electrical & Computer Engineering |  |  |  |
|  | **Total Semester load** | | **20 Cr. Hrs** | **31 ECTS** |  |  |  |  |  |

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| **No** | **Course Name** | **Course Code** | **Cr. Hrs**  (Lec+Tut+Lab) | **ECTS**  (Lec+Tut+  Lab+Home) | **Pre-requisite** | **Responsible**  **Chair/Department** | **Name of assigned Instructor** | **Assigned sections** | **Remark** |
| 1 | Machine Design project | MEng 4066 | 3(1+0+6) | 6(1+6+0+5) | MEng 3064 | SMD Chair | Abrha G.  Alem B. | 1,2  3,4 |  |
| 2 | Solid Mechanics Laboratory | MEng 4065 | 1 (0+0+3) | 2(0+0+3+1) | MEng 3064 | SMD Chair | Abrha G  Besufekad Getachew | 1,2  3,4 |  |
| 3 | Regulation and Control Engineering | MEng 4162 | 3(2+3+0) | 5(2+3+0+5) | Math 2033, EEng 3153 | IAC Chair |  |  |  |
| 4 | Refrigeration and Air Conditioning | MEng 4114 | 3(2+2+1) | 5(2+2+1+5) | MEng 3113 | TES Chair |  |  |  |
| 5 | Power Plant Engineering | MEng 4115 | 3(2+3+0) | 5(2+3+0+5) | MEng 3113 | TES chair |  |  |  |
| 6 | Material Handling Equipments | MEng 4131 | 3(2+3+0) | 5(2+3+0+5) | MEng 3064 | TEGV Chair |  |  |  |
|  | **Elective I** |  |  |  |  |  |  |  |  |
| 8 | Design for Manufacturing | MEng 4211 | 3(2+3+0) | 4(2+3+0+3) | Module 6 | SMD chair | Mogos Samuel | all | Design focus area (stream) |
| Renewable Energy Technology I | MEng 4241 | 3(2+2+1) | 4(2+2+1+3) | Module 11 | TES Chair |  |  | Thermo-fluid & Energy stream (focus area) |
| Tools, Jigs and Die Design | MEng 4221 | 3(2+3+0) | 4(2+3+0+3) | Module 10 | ME chair |  |  | Manufacturing focus area (stream) |
| Automotive Maintenance | MEng 4251 | 3(2+3+0) | 4(2+3+0+3) | MEng 4131  MEng 4131  MEng 4141 | TEGV chair |  |  | Automotive &Transportation focus area (stream) |
|  | **Total Semester load** | | **19 Cr. Hrs** | **32 ECTS** |

**Year IV Semester I (Advisor: Mr. Solomon Teklemichael) (4 sections)**

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| **Module 6** | **Module 10** | **Module 11** |
| MEng 2061, MEng 2062  MEng 3063, MEng 3064  MEng 4065, MEng 4066 | MEng 1101, MEng 2102  MEng 3103, MEng 3104 | MEng 2111, MEng 2112  MEng 3113, MEng 4114  MEng 4115, MEng 4116, MEng 4117 |

**Year V Semester I (Advisor: Mr. Kalekirstos Gebremariam) (4 sections)**

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| **No** | **Course Name** | **Course Code** | **Cr. Hrs**  (Lec+Tut+Lab) | **ECTS**  (Lec+Tut+  Lab+Home) | **Pre-requisite** | **Responsible**  **Chair/Department** | **Name of assigned instructor** | **Assigned Sections** | **Remark** |
| 1 | Industrial Internship | MEng 5191 | 15(0+9+36) | 30(0+9+36+15) | All Core Modules except year 5 semester II courses | All chairs of SMIE |  |  |  |
|  | **Total Semester load** | | **15 Cr. Hrs** | **30 ECTS** |