表1 机械设计制造及其自动化专业课程设置一览表

| 课程类型 | 课程编号 | 课程名称 | 学分 | 总学时 | 学时分配 | 必修/选修 | 开设学院 | 开设学期 | 知识贡献 | 能力贡献 | 素质贡献 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 讲课 | 实验 |
| 通识类 (39.7%)63.5学分 | 思想政治理论课 | 1181001 | 中国近现代史纲要 Essentials of Modern & Contemporary History of China | 1.5 | 24 | 24 |  | 必修12学分 | 思政部 | 1 | A1 | B2 | C1C3 |
| 1181002 | 思想道德修养与法律基础Ideological and Moral Cultivation and Legal Foundation | 2.5 | 40 | 40 |  | 思政部 | 1 | A1A2 | B2B4 | C1C2C3C4 |
| 2181003 | 马克思主义基本原理The Fundermental Principles of Marxism | 2.5 | 40 | 40 |  | 思政部 | 3 | A1 | B3 | C1C4 |
| 3181004 | 毛泽东思想和中国特色社会主义理论体系概论Introduction to Mao Zedong Thought and Theoretical System of Socialism with Chinese Characteristics | 3.5 | 56 | 56 |  | 思政部 | 6 | A1 | B1B2B3 | C1C2C3C4 |
| 2181005 | 形势与政策Current Affairs and Policy | 2.0 | 四年累计参加8次 | 思政部 | 4 | A1A2 | B2 | C1C2C3C4 |
| 英语 | 1191001 | 大学英语ⅠCollege English Ⅰ | 3 | 64 | 32 | 32 | 必修12学分 | 外语系 | 1 | A1A4A5 | B1B3B4 | C1C2C3 |
| 1191002 | 大学英语ⅡCollege EnglishⅡ | 3 | 64 | 32 | 32 | 外语系 | 2 | A1A4A5 | B1B3B4 | C1C2C3 |
| 2191001 | 大学英语ⅢCollege EnglishⅢ | 3 | 64 | 32 | 32 | 外语系 | 3 | A1A2A5 | B1B3B5 | C1C3C4 |
| 2191002 | 大学英语ⅣCollege EnglishⅣ | 3 | 64 | 32 | 32 | 外语系 | 4 | A1A2A5 | B1B3B5 | C1C3C4 |
| 体育 | 1241001 | 体育ⅠP.E. Ⅰ  | 1.0 | 30 | 30 |  | 必修4学分 | 体育部 | 1 | A1A2 | B2B3B4 | C1C2C3C4 |
| 1241002 | 体育ⅡP.E.Ⅱ | 1.0 | 30 | 30 |  | 体育部 | 2 | A1 | B4 | C1C2C3C4 |
| 2241001 | 体育ⅢP.E.Ⅲ | 1.0 | 30 | 30 |  | 体育部 | 3 | A1A2 | B2B4 | C1C2C3C4 |
| 2241002 | 体育IV P.E.Ⅳ | 1.0 | 30 | 30 |  | 体育部 | 4 | A1 | B4 | C2C3 |
| 自然科学 | 1151001 | 高等数学（甲）IAdvanced Mathematics（A）I | 5.5 | 88 | 88 |  | 必修24学分 | 理学院 | 1 | A3 | B2 | C2C4 |
| 1151002 | 高等数学（甲）II Advanced Mathematics（A）II | 5.5 | 88 | 88 |  | 理学院 | 2 | A3 | B2 | C2C4 |
| 1151006 | 线性代数Ⅱ  Linear Algebra Ⅱ | 2.5 | 40 | 40 |  | 理学院 | 3 | A3 | B2 | C2C4 |
| 1151008 | 概率论与数理统计ⅠProbability and StatisticsⅠ | 4.0 | 64 | 64 |  | 理学院 | 3 | A3 | B2 | C2C4 |
| 1151101 | 大学物理（甲）College Physics（A） | 5 | 80 | 80 |  | 理学院 | 2 | A3 | B2B3 | C3C4 |
| 2151102 | 大学物理实验（甲）College Physics Experiments (A) | 1.5 | 48 |  | 48 | 理学院 | 3 | A3 | B2B3 | C3C4 |
| 通识类 (39.7%) 63.5学分 | 计算机 | 1091002 | 大学计算机基础（乙）Fundamentals of Computer Sciences（B） | 2.5 | 48 | 32 | 16 | 必修5.5学分 | 信息学院 | 1 | A4 | B1B2B3 | C2C4 |
| 1091004 | 程序设计基础（C） Fundamentals of Programming (C) | 3.0 | 56 | 36 | 20 | 信息学院 | 2 | A4 | B1B2B3 | C2C4 |
| 通识类选修 | 新生研讨课Freshman Seminar | 1.0 | 20 | 20 |  | 专题讲座 | 机电学院 | 1 |  |  |  |
| 科技发展与文明传承 | 选修5学分(含公共艺术类课程1学分) |  |  |  |  |  |
| 文明对话与国际视野 |  |  |  |  |  |
| 人文素养与人生价值 |  |  |  |  |  |
| 自然环境与社会发展 |  |  |  |  |  |
| 经济管理与社会科学 |  |  |  |  |  |
| 学科类(38.4%) 61.5学分 | 学科大类基础课 | 1082202 | 工程制图（甲）Mechanical Drawing（A） | 4.0  | 72 | 56 | 16 | 必修22学分 | 机电学院 | 1 | A6 | B6 | C5C6 |
| 1082205 | 理论力学Theoretical Mechanics | 4.0 | 64 | 64 |  | 机电学院 | 2 | A6 | B6 | C5C6 |
| 2082208 | 材料力学Mechanics of Materials | 4.0 | 68 | 60 | 8 | 机电学院 | 3 | A6 | B6B10 | C5C6 |
| 2082209 | 机械原理Theory of Machines and Mechanisms | 3.5 | 56 | 48 | 8 | 机电学院 | 3 | A6 | B6B10 | C5C6C9 |
| 2082212 | 机械设计Mechanical Design | 4 | 64 | 56 | 8 | 机电学院 | 4 | A6 | B6B10 | C5C6 C7 |
| 1082303 | 电工技术Electrical Technology | 2.5 | 44 | 36 | 8 | 机电学院 | 4 | A6 | B6B10 | C5C6 |
| 学科基础课 | 2083210 | 机械工程材料Mechanical Engineering Materials | 2.0  | 32 | 26 | 6 | 必修21.5学分 | 机电学院 | 3 | A6 | B6B10 | C5C8 |
| 2083214 | 机械精度设计及检测技术（甲）Mechanical Precision Design and Verification Basic（A） | 2.5  | 40 | 32 | 8 | 机电学院 | 4 | A6 | B6B10 | C5C8 |
| 2083213 | 材料成型基础Material Forming Processing Technology | 2.0  | 32 | 32 |  | 机电学院 | 4 | A6 | B11 | C5 |
| 3083219 | 机械制造技术基础（甲）Fundamental of Mechanical Manufacturing Technology（A） | 3.0  | 48 | 42 | 6 | 机电学院 | 5 | A8 | B8B10 | C7C8 |
| 2083309 | 电子技术（乙）Electronic Technology（B） | 3.0 | 60 | 44 | 16 | 机电学院 | 5 | A6 | B6B10 | C5C6 |
| 3083322 | 机械工程控制基础Cybernetics Foundation for Mechanical Engineering | 2.5  | 44 | 36 | 8 | 机电学院 | 5 | A6 | B7B10 | C7C8 |
| 2083109 | 液压与气压技术Hydraulic and Atmospheric Technique | 2.5  | 40 | 36 | 4 | 机电学院 | 5 | A8 | B7B10 | C7C8 |
| 3083331 | 机械工程测试技术（乙）Mechanical Engineering Test Technology（B） | 2.0  | 32 | 24 | 8 | 机电学院 | 6 | A7 | B7B10 | C8C7 |
| 学科类(38.4%) 61.5学分 | 学科基础课 | 3083226 | 数控技术Numerical Control Technology | 2.0  | 34 | 28 | 6 | 必修21.5学分 | 机电学院 | 6 | A9 | B9B10 | C7C8 |
| 1083206 | 计算机绘图Computer Aided Drawing | 1.0  | 32 |  | 32 | 选修9.5学分（24） | 机电学院 | 2 | A9 | B9 | C5 |
| 2083103 | 流体力学 Fluid Mechanics | 2.0 | 32 | 28 | 4 | 机电学院 | 4 | A6 | B6 | C6 |
| 2083107 | 热工基础 Fundamentals of Heat Engineering | 2.0 | 32 | 28 | 4 | 机电学院 | 5 | A6 | B6 | C6 |
| 3083218 | 机械CAD技术基础 CAD for Mechanics | 2.0 | 40 | 24 | 16 | 机电学院 | 5 | A9 | B9 | C7C8 |
| 3083225 | 三维实体造型设计基础 3D Solid Design | 1.0 | 32 | 0 | 32 | 机电学院 | 6 | A9 | B9 | C7C8 |
| 3083224 | 机械系统动力学 Dynamics of machinery system | 2.0 | 32 | 32 |  | 机电学院 | 6 | A9 | B9 | C7C8 |
| 3083343 | 单片机原理与接口技术（乙）Principle and Interface Technology of Single Chip Microcomputer（B） | 2.5 | 48 | 32 | 16 | 机电学院 | 6 | A6 | B7 | C6 |
| 3084151 | 机电一体化系统设计Mechatronics System Design | 2.0 | 32 | 32 |  | 机电学院 | 6 | A7 | B7 | C6 C9 |
| 3083367 | 机电传动控制Mechanical & electrical Transmission Control | 3.5 | 56 | 48 | 8 | 机电学院 | 6 | A7 | B7 | C7 C9 |
| 3083234 | 机械优化设计 Mechanical Optimal Design | 2.0 | 32 | 24 | 8 | 机电学院 | 7 | A9 | B9 | C7C8 |
| 3083344 | 可编程控制器原理与应用Principle and Application of PLC | 2.0 | 40 | 24 | 16 | 机电学院 | 7 | A8 | B8 | C7C8 |
| 4083355 | 机电系统计算机控制（乙）Computer Control of Machine and Electricity（B） | 2.0 | 32 | 24 | 8 | 机电学院 | 7 | A9 | B9 | C7C8 |
| 专业课方向Ⅰ | 3084221 | 工程机械设计基础Fundamentals of Construction Machinery Design | 2.0 | 32 | 32 |  | 选修8.5学分（11.5） | 机电学院 | 5 | A7 | B7 | C5 |
| 3084228 | 机械系统设计 Mechanical system design | 2.0 | 32 | 32 |  | 机电学院 | 6 | A7 | B7 | C5 |
| 3084152 | 农产品加工机械设备Agricultural Products Processing and Equipment  | 2.0 | 32 | 32 |  | 机电学院 | 6 | A7 | B7 | C5 |
| 3084154 | 汽车拖拉机(乙) Automobile Tractor（B） | 2.0 | 32 | 32 |  | 机电学院 | 6 | A7 | B7 | C5 |
| 3084327 | 有限元分析Finite Element Analysis | 1.5 | 40 | 8 | 32 | 机电学院 | 7 | A9 | B9 | C6 |
| 4084153 | 农业机械学(乙) Science of Agricultural Machinery（B） | 2.0 | 32 | 28 | 4 | 机电学院 | 7 | A7 | B7 | C5 |
| 学科类(38.4%) 61.5学分 | 专业课方向II | 3084222 | 模具设计与制造 Dies Design and Manufacture | 2.0 | 32 | 32 |  | 选修8.5学分（11.5） | 机电学院 | 5 | A8 | B8 | C7 C8 |
| 3084229 | 机械制造装备设计Mechanism Equipment Design | 2.0 | 32 | 32 |  | 机电学院 | 6 | A8 | B8 | C7 C8 |
| 3084231 | 先进制造技术 Advance Manufacturing Technology | 2.0 | 32 | 32 |  | 机电学院 | 6 | A9 | B9 | C7 C8 |
| 3084230 | 精密与特种加工 Precision and Special Machining Technology | 2.0 | 32 | 32 |  | 机电学院 | 6 | A9 | B9 | C7C8 |
| 4084236 | 计算机辅助制造Computer aided manufacturing | 1.5 | 32 | 16 | 16 | 机电学院 | 7 | A9 | B9 | C7 C8 |
| 4084235 | 机械制造自动化技术Machinery Manufacture Automation Technology | 2.0 | 32 | 32 |  | 机电学院 | 7 | A8 | B8 | C7C8 |
| 综合实践(21.9%) 35学分 | 综合实践 | 1305101 | 军训（含国防教育）Military training (including national defense education) | 2 | 3周 |  |  | 必修33学分 | 人武部 | 1 | A1 | B3 | C1C3 |
| 1305201 | 劳动Physical Work |  | 4周 |  |  |  |  | A1 | B3 | C1C3 |
| 1305301 | 社会实践Social practice |  |  |  |  |  |  |  |  |  |
| 1185007 | 思想政治理论课实践Practice of Ideological and Political Theory | 4 | 4周 |  |  | 思政部 | 2 | A1 | B3 | C1C3 |
| 1085207 | 工程制图测绘Training of Mechanical Drawing | 1.0  | 1周 |  |  | 机电学院 | 2 | A6 | B6 | C5 |
| 1085001 | 工程训练(甲)Engineering Training（A） | 4.0  | 4周 |  |  | 机电学院 | 2 | A6 | B6 | C5 |
| 2085216 | 机械原理课程设计Lessons Design for Mechanisms and Machine Theory | 1.0  | 1周 |  |  | 机电学院 | 4 | A6 | B6 | C5 |
| 2085217 | 机械设计课程设计Lessons Design for Mechanical Design | 3.0  | 3周 |  |  | 机电学院 | 4 | A6 | B6 | C5 |
| 3085223 | 机械拆装实习Mechanism Disassembling and installation | 1.0 | 1周 |  |  | 机电学院 | 5 | A6A7A8 | B8 | C7C9 C8 |
| 3085232 | 机械工程实习Practice of Mechanical Engineering | 2.0  | 2周 |  |  | 机电学院 | 6 | A8 | B8B9 | C7C9 C8 |
| 3085233 | 机械制造技术基础课程设计Course Design of Mechanical Manufacture Technology | 2.0  | 2周 |  |  | 机电学院 | 6 | A8 | B8 | C7C9 C8 |
| 4085238 | 现代设计与制造综合实训Integrated Training of Modern Design and Manufacture | 3.0 | 3周 |  |  | 机电学院 | 7 | A9 | B9B11 | C7 C8 |
| 综合实践 (21.9%) 35学分 | 综合实践 | 3085128 | 机电一体化综合实训Integrated Training of Mechatronic Systems | 2.0 | 2周 |  |  | 必修33学分 | 机电学院 | 7 | A7 | B7B11 | C6 C9 |
| 4305001 | 毕业设计(论文)Undergraduate Thesis | 10 | 16周 |  |  | 机电学院 | 8 | A6A7 A8A9 | B6 B7 B8 B9 B10B11 | C6C7C8C9 |
| 素质与能力拓展学分 |  |  | 8.0 |  |  |  | 必修 |  |  |  |  |  |
| 备注:标●号为全英文课程；标※号为双语课程。 |