Academic Year: 104 (Aug 2015~ Jul2016)

Department: Department of Industrial Engineering and Management

Academic Degree: Master of Science (MS)

Require courses: 106.11.16updated

|  |  |  |  |
| --- | --- | --- | --- |
| Freshman | Sophomore | Junior | Senior |
| 1st semester | 2nd semester | 1st semester | 2nd semester | 1st semester | 2nd semester | 1st semester | 2nd semester |
| Require courses for General (含通識8學分,Total 30 credits) |
| Physical Education2-0-0 | Physical Education2-0-0 | Physical Education2-0-0 | Physical Education2-0-0 |  |  |  |  |
| Practicum in English Communication（Ι）0-2-1 | Practicum in English Communication（Ⅱ）0-2-1 | English Presentation and Writing（Ι）2-0-2 | English Presentation and Writing（Ⅱ）2-0-2 | Career English2-0-2 |  |  |  |
| Selected Reading in Prose2-0-2 | Appreciation of Chinese Literature2-0-2 |  | Practical Chinese2-0-2 | Constitution and Law2-0-2 | Philosophical Thinking2-0-2 |  |  |
| Life Education2-0-2 | Historical Thinking2-0-2 | General Education2-0-2 | General Education2-0-2 | General Education2-0-2 | General Education2-0-2 |  |  |
| Service Learning0-2-0 | Service Learning0-2-0 |  |  |  |  |  |  |
| 8-4-7 | 8-4-7 | 6-0-4 | 6-0-4 | 4-0--4 | 4-0-4 |  |  |
| Require courses for College(Total 15 credits) |
| Economics（Ⅰ） 3-0-3 | Accounting 3-0-3 |  |  |  | Business Ethics 2-0-2 |  |  |
| Management Theory (一)2-0-2 | Management Theory (二)2-0-2 | Statistics（Ⅰ） 3-0-3 |  |  |  |  |  |
| 5-0-5 | 5-0-5 | 3-0-3 |  |  | 2-0-2 |  |  |
| Require courses for Department (Total 63 credits) |
| Physics 3-0-3 | Physics Lab.0-3-1 | Systems Analysis and Design 3-0-3 | Statistics（Ⅱ） 3-0-3 | Production Management 3-0-3 | Senior Design（Ⅰ）0-2-1 | Special Practicing Project（Ⅱ） 0-2-1 |  |
| Introduction to Computer Science3-0-3 | Object-Oriented Programming Design 3-0-3 | Operations Research（Ⅰ） 3-0-3 | Operation Research（Ⅱ）3-0-3 | Quality Management 3-0-3 | E-Manufacturing2-2-3 |  |  |
| Introduction to Computer Practice 0-2-1 | Object Oriented Programming Design Practices0-2-1 | Work Study 3-0-3 | Facilities Planning 3-0-3 | Engineering Economics 3-0-3 | Introduction to Human Factor 3-0-3 |  |  |
| Calculus（Ⅰ）3-0-3 | Calculus（Ⅱ） 3-0-3 | Work Study Practice0-2-1 | Facilities Planning Practice3-0-3 |  |  |  |  |
|  | Engineering Graphics3-0-3 |  | Manufacturing Process3-0-3 |  |  |  |  |
|  | Linear Algebra 3-0-3 |  | Manufacturing Process Practice0-2-1 |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 9-2-10 | 12-5-14 | 12-2-13 | 12-7-15 | 9-0-9 | 5-4-7 | 0-2-1 | 0-0-0 |

Selected courses:

|  |  |  |  |
| --- | --- | --- | --- |
| Freshman | Sophomore | Junior | Senior |
| 2nd semester | 1st semester | 2nd semester | 1st semester | 2nd semester | 1st semester | 2nd semester | 1st semester |
|  |  |  |  |  | Enterprise Resource Planning－Production Management Modules2-2-3 | Special Topics on Industrial Engineering and Management (一) 3-0-3 | Lean Production Management 3-0-3 Enterprise Resource Planning－Financial Accounting Modules3-0-3 Special Topics on Industrial Engineering and Management (二)3-0-3 |
|  |  |  |  | Green Production3-0-3 | Operations Management3-0-3Introduction to Green Products3-0-3 | Materials Management3-0-3 Introduction to Integration of Manufacturing and Commercial3-0-3Local Business Operation3-0-3 | Global Supply Chain Management3-0-3 Management Practices3-0-3 |
|  |  |  |  |  |  | Introduction to Probability3-0-3 | Industrial Scheduling and Its Applications3-0-3 soft computing3-0-3 |
|  |  |  |  | System Simulation2-2-3 | Industrial Environment and Safety3-0-3Introduction to Research Methods in Behavioral Science3-0-3 |  | Managerial Psychology3-0-3 |
|  |  |  |  | Quality Engineering 3-0-3 Reliability Management3-0-3 | Statistical Application Software3-0-3 | Introduction to Big Data Analysis 3-0-3 |  |
|  |  |  | Management Information Systems3-0-3 | Database Design and Web Programming3-0-3 | Office Automation3-0-3 | Electronic Business3-0-3 Cost and Management Accounting3-0-3 | I |
|  |  | Organization and Management3-0-3 | Management Thinking3-0-3 | Introduction to Hospital Management3-0-3 | Introduction to Medical Information3-0-3 | Continuous Improvement Program3-0-3 | Industry Practice（Ⅰ）1-8-5 |
|  |  |  | Decision Analysis3-0-3 |  |  |  | Industry Practice（Ⅱ）1-8-5 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| **Selected Courses:** at least 26 Credits for required < Could be covered 9 credits from other department> |
| **Required Courses:** 136 Credits |