Department of Industrial Systems Engineering and Management Recommended Schedule for DDP in BEng (ISE) and BBA for Cohorts AY2021/2022 onwards

Year 1 Year 1

| Semester 1 | Units | | Semester 2 | Units | |
|---|-------|----|--|-------|----|
| CS1010E Programming Methodology | 4 | CA | ST2334 Probability and Statistics | 4 | C1 |
| EG1311 Design and Make | 4 | C1 | DTK1234 Design Thinking | 4 | C1 |
| GE (Cultures & Connections) | 4 | CA | MA1508E Linear Algebra for Engineering | 4 | C1 |
| IE1111R Industrial & Systems Engineering Principles & Practice I* | 4 | C1 | IE2111 Industrial & Systems Engineering Principles & Practice II | 4 | C1 |
| MA1511 Engineering Calculus | 2 | C1 | PF1101 Fundamentals of Project Management | 4 | C1 |
| MA1512 Differential Equations for Engineering | 2 | C1 | ACC1701 Accounting for Decision Makers | 4 | C2 |
| DAO1704 Decision Analytics using Spreadsheets | 4 | C2 | STR1000 Career Creation Starter Workshops | | C2 |
| BPM1701 Calculus and Statistics | 0 | C2 | | | |
| BPM1702 Microsoft Excel and PowerPoint for Business | 0 | C2 | | | |
| BPM1705 Understanding How Business Works | 0 | C2 | | | |
| Sub-total | 24 | | Sub-total | 24 | |

Year 2 Year 2

| Semester 3 | Units | | Semester 4 | Units | |
|---|-------|----|---|-------|----|
| ES2631 Critique and Communication of Thinking | 4 | CA | EG2501 Liveable Cities | 4 | C1 |
| and Design | | | | | |
| IE2141 Systems Thinking and Dynamics | 4 | C1 | EE2211 Introduction to Machine Learning | 4 | C1 |
| IE2110 Operations Research I | 4 | C1 | IE2100 Probability Models with Applications | 4 | C1 |
| CS2040 Data Structures and Algorithms | 4 | C1 | CDE2000 Creating Narratives | 4 | C1 |
| BSP1703 Managerial Economics | 4 | C2 | MKT1705 Principles of Marketing | 4 | C2 |
| MNO1706 Organisational Behaviour | 4 | C2 | GE (Singapore Studies) | 4 | CA |
| STR2000 Career Creation Starter Clinics | 0 | C2 | | | |
| Sub-total | 24 | | Sub-total | 24 | |

Year 3 Year 3

| Semester 5 | Units | | Semester 6 | Units | |
|--|-------|----|-------------------------------------|-------|----|
| IE3101 Statistics for Engineering Applications | 4 | C1 | EG3611A Industrial Attachment | 10 | C1 |
| IE3110R Simulation | 4 | C1 | EG2401A Engineering Professionalism | 2 | C1 |
| BSP1702 Legal Environment of Business | 4 | C2 | UE* | 4 | C1 |
| FIN2704 Finance | 4 | C2 | | | |
| GE (Communities and Engagement) | 4 | CA | | | |
| BIZ Specialisation Course 1 | 4 | C2 | | | |
| Sub-total | 24 | | Sub-total | 16 | |

Year 4 Year 4

| Semester 7 | Units | | Semester 8 | Units | |
|--|-------|----|--|-------|----|
| IE3100R Systems Design Project | 4 | C1 | IE3100R Systems Design Project | 4 | C1 |
| BSP2701 Global Economy | 2 | C2 | ISE Technical Elective | 4 | C1 |
| DAO2702 Programming for Business Analytics | 4 | C2 | BIZ Specialisation Course 3 | 4 | C2 |
| DAO2703 Operations and Technology Management | 4 | C2 | MNO2705 Leadership and Decision Making under Uncertainty | 4 | C2 |
| BIZ Specialisation Course 2 | 4 | C2 | | | |
| Sub-total | 18 | | Sub-total | 16 | |

Year 5

| Semester 9 | Units | | | |
|---|-------|----|--|--|
| BIZ Specialisation Course 4 | 4 | C2 | | |
| BSP3701 Strategic Management | 4 | C2 | | |
| BIZ Common Elective (Select one from Table A) | 4 | CA | | |
| Sub-total Sub-total | 12 | | | |

Total (Minimum) = 182 Units

Note:

The above is only a recommended schedule and the course offer semesters are subject to changes.

* IE1111R is double counted to fulfill both the ISE Major requirements and GE-Data Literacy Pillar. As a result, students must take 4 Units of unrestricted electives to plug the difference.

Table A: BIZ courses that can be double-counted as electives in ISE major

| Select ONE module: | Units | |
|---|-------|----|
| DBA4811 Analytical Tools for Consulting | 4 | CA |
| FIN3701 Corporate Finance | 4 | CA |
| FIN3702 Investment Analysis and Portfolio | | CA |
| Management | 4 | CA |

The courses are counted towards your CAP in the following manner:

1st Degree - Tagged as C1
2nd Degree - Tagged as C2
Both 1st and 2nd degrees - Tagged as CA