

Department of Industrial Systems Engineering and Management
Recommended Schedule for DDP in BEng (ISE) and BBA (Hons) for Cohorts AY2024/2025 onwards

Year 1

Semester 1			Semester 2		
Units			Units		
CS1010E Programming Methodology	4	CA	ST2334 Probability and Statistics	4	C1
DTK1234 Design Thinking	4	C1	EG1311 Design and Make	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	0	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

Semester 3			Semester 4		
Units			Units		
CDE2000 Creating Narratives	4	C1	CDE2501 Liveable Cities	4	C1
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	ES2631 Critique and Communication of Thinking and Design	4	CA
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

Semester 5			Semester 6		
Units			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

Semester 7			Semester 8		
Units			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			Semester 10		
Units			Units		
BIZ Specialisation Course 4	4	C2	BIZ Honours Requirements [#]	12/20	C2
BSP3701 Strategic Management	4	C2			
BIZ Common Elective (Select one from Table A)	4	CA			
Sub-total	16		Sub-total	12/20	

Total (Minimum) = 194 or 202 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.

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

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

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

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

BIZ honours requirements (20 Units) may include FSP4003 Field Service Project. Students may double-count the Integrated Project course-IE3100R (8 Units) in CDE towards FSP4003 (8 Units) in BIZ. They must seek approval from BIZ to pursue the option for the double-counting:

Work on a group project in the Integrated Project course which has a significant business element. The business element will not be graded as a part of the Integrated Project course, but students will require BIZ to endorse the project scope at the start of the project and submit an additional write-up to BIZ at the end of the project.