

**Possible (non-binding) schedule for Industrial and Systems Engineering (ISE) students in the B.Eng (Hons) / B.A Double Degree Programme (AY2016/17) onwards**

<b>YEAR 1</b>		
<b>Semester 1</b>		<b>M Cs</b>
MA1505 Mathematics I <sup>1</sup>	CA	4
ST1131 Introduction to Statistics <sup>1</sup>	C1	4
Basket of Engineering Science modules	C1	4
CS1010E Programming Methodology	C1	4
EC1101E Introduction to Economic Analysis	C2	4
GER1000 Quantity Reasoning(QR)-GEM 1	CA	4
<b>Semester 2</b>		<b>M Cs</b>
MA1506 Mathematics II <sup>1</sup>	CA	4
IE2140 Engineering Economy <sup>2</sup>	C1/CA	4
ST2131 Probability	C1	4
ES1531 Critical Thinking & Expository Writing	CA	4
EC2101 Microeconomic Analysis I	C2	4
<b>YEAR 2</b>		
<b>Semester 1</b>		<b>M Cs</b>
IE2110 Operations Research I <sup>2</sup>	C1/CA	4
CS1020E Data Structures and Algorithms	C1	4
IE2101 Introduction to Systems Thinking	C1	4
FASS Level-1000 Exposure module (Asian Studies) X 1 (CH1101E/CL1101E/JS1101E/MS1101E/SE1101E/SN1101E)	C2	4
Human and Cultures -GEM 2	CA	4
<b>Semester 2</b>		<b>M Cs</b>
IE2100 Probability Models with Applications	C1	4
IE2130 Quality Engineering I	C1	4
IE2150 Human Factors Engineering	C1	4
FAS1102 Public writing and communication	C2	4
EC2102 Macroeconomic Analysis I	C2	4
Asking Questions –GEM 3	CA	4

<b>YEAR 3</b>		
<b>Semester 1</b>		<b>MCs</b>
IE3100M Systems Design Project	C1	6
IE3101 Statistics for Engineering Applications	C1	4
IE3110 Simulation	C1	5
B.Eng. Technical Electives X 1 (Table D) <sup>2</sup>	C1/CA	4
Singapore Studies – GEM 4	CA	4
EC3303 Econometrics I	C2	4
<b>Semester 2</b>		<b>MCs</b>
IE3100M Systems Design Project (cont'd)	C1	6
B.Eng./BA Technical Electives X 1 (Table D) <sup>2</sup>	C1/CA	4
EC3101 Microeconomics Analysis II	C2	4
EC3102 Macroeconomics II	C2	4
Free Elective module (Select any two of NUS Modules)	C1	8
<b>YEAR 4</b>		
<b>Semester 1</b>		<b>MCs</b>
IE4100R B.Eng. Dissertation	C1	4
B.Eng. Technical Electives <sup>†</sup> X 2	C1	8
B.A (Econ) common module X 1 (Table D) <sup>2</sup>	CA	4
B.A (Econ) Elective X1 (level 2000/3000)	C2	4
Thinking & Expression – GEM 5	CA	4
<b>Semester 2</b>		<b>MCs</b>
IE4100R B.Eng. Dissertation (con't)	C1	4
B.Eng. Technical Electives X 1	C1	4
PH2208 Applied Ethics /PH2281/PH2223(replaces EG2401) <sup>1</sup>	CA	4
B.A (Econ) Electives X 1 (level 2000/3000)	C2	4
B.A (Econ) Electives x 2 (level 3000)	C2	8

Minimum MCs = 180MC

<sup>†</sup> must be IE coded from list of ISE elective modules

The modules that DDP students take are counted towards the CAP in the following manner:

1 <sup>st</sup> Degree	Classified as C1 in the database
2 <sup>nd</sup> Degree	Classified as C2 in the database
Both 1 <sup>st</sup> and 2 <sup>nd</sup> degrees	Classified as CA in the database

Additional modules taken will be counted towards C1, except for modules offered by the faculty of the student's 2<sup>nd</sup> degree, which will be classified as C2.

Table D: BEng & BA modules that may be considered as common modules

(12 MCs of Electives: At least One BEng Module and at least One BA (Econs) Module)

B.Eng. Modules	BA – Economics Modules
IE2110; IE2140; IE3120; IE4220; IE4240; IE4242; IE4243 ; IE4244	EC3312; EC3322; EC3332; EC3333; EC3382; EC3385; EC3386; EC4311; EC4303; EC4372; EC5104; EC5314; EC4322; EC5324R ;

Noted 1:

Students who are taking ES1531 have fulfilled B. Eng. Programme requirements. However, students need to do another GE module to fulfil T & E Pillar's requirement.

Noted 2:

Only for ISE DDP students from cohort AY 2012 onwards:

With the removal of the Level 1000 Physics module as an Unrestricted Elective requirement, the DDP students in this programme will be fully exempted from Unrestricted Electives. In addition, with the inclusion of several Economics modules as non-ISE technical electives in the BEng (ISE) curriculum.

Besides, students have required to taking at least 12 MC as common modules (CA) from the below table to meet the both degree requirements.

Four common modules (12 MC): MA1505, MA1506, and PH2208/PH2223 or PH2218.

At least select two modules (8 MC) from the Table D for the Common Technical Elective modules to meet both of the degree requirement

- Please take note that 8 MC of the following modules:  
*At least One BEng Module as shown in Table D*  
*At least One BA(Econs) Module as shown in Table D*

Noted 3:

Students also required to taking one free elective module from any of the NUS modules to meet the ISE major program requirement.

