AU Requirement for Double Degree Programme (DDP)
Bachelor of Engineering (Aerospace Engineering) and Bachelor of Social Science (Economics)
Students admitted from AY2020/2021

| Year of Study | Number of Academic Units (AUs) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AE CORE (C) | ECONS CORE (EC) | AE MAJOR PE (PE) | ECONS ELECTIVE (EPE) | General Education Requirement (GER) | | | | | | Total |
| | | | | | Core (GC) | Prescribed Electives | | | | UE | |
| | | | | | | LA | STS | BM | ANY | | |
| 1 | 25 | 12 | - | - | 8 | - | - | - | - | - | 45 |
| 2 | 29 | 3 | - | 3 | 1 | - | - | - | - | - | 36 |
| 3 | 22 | 3 | - | - | 3 | - | - | - | - | - | 28 |
| 4 | 9 | 7 | - | 18 | 2 | - | - | - | - | - | 36 |
| 5 | 11 | - | 6 | 18 | - | - | - | - | - | - | 35 |
| Total | 96 | 25 | 6 | 39 | 14 | 0 | | | | 0 | 180 |

Curriculum for Double Degree Programme (DDP)
Bachelor of Engineering (Aerospace Engineering) and Bachelor of Social Science (Economics)
Students admitted from AY2020/2021

| Course Code and Title | Type | AU | Pre-requisite/ Remarks |
|---|---|---|---|
| **YEAR 1 SEMESTER 1** | | | |
| MH1810 Mathematics I | C | 3 | |
| PH1011 Physics<br>OR PH1012 Physics A | C | 3<br>4 | PH1011: 'A' level Physics |
| Engineering Fundamentals 2 | C | 3 | |
| MA2001 Mechanics of Materials | C | 3 | |
| HE1001 Microeconomics Principles | EC | 3 | |
| HE1002 Macroeconomics Principles | EC | 3 | |
| HW0188 Effective Communication | GC | 2 | HW0001 (co-requisite) |
| GC0001 Sustainability: Seeing Through The Haze | GC | 1 | |
| ET0001 Enterprise & Innovation | GC | 1 | |
| HY0001 Ethics and Moral Reasoning | GC | 1 | |
| **Total** | | **23** | |
| | | | |
| **YEAR 1 SEMESTER 2** | | | |
| MH1811 Mathematics II | C | 3 | |
| MA1001 Dynamics | C | 3 | Having read PH1011/PH1012/CY1305 and MH1810/MH2812/ CY1201 |
| MA1008 Introduction to Computational Thinking | C | 3 | |
| MA1700 Aerospace Discovery Course | C | 1 | |
| MA2003 Introduction to Thermo-fluids | C | 3 | |
| HE1005 Introduction to Probability and Statistical Inference | EC | 3 | |
| HE2002 Intermediate Macroeconomics | EC | 3 | HE1002/AB9091/HE9091 |
| EG0001 Engineers and Society | GC | 3 | |
| **Total** | | **22** | |
| | | | |
| **YEAR 2 SEMESTER 1** | | | |
| MA2005 Engineering Graphics | C | 3 | |
| MA2006 Engineering Mathematics | C | 3 | (MH1810 & MH1811)/ MH2812/CY1203 |
| MA2072 Laboratory Experiments (AE) | C | 1 | |
| MA2701 Flight Performance | C | 2 | MA1001 & MA1700 |
| MA3700 Aircraft Structures I | C | 3 | MA2001 |
| MA3701 Aerodynamics | C | 3 | MA2003 |
| Economics Elective 1 | EPE | 3 | |
| ML0003 Kickstart Your Career Success | GC | 1 | |
| **Total** | | **19** | |
| | | | |
| **YEAR 2 SEMESTER 2** | | | |
| MA2007 Thermodynamics | C | 3 | MA2003 |
| MA2700 Aerospace Materials & Manufacturing Process | C | 3 | |
| MA2079 Engineering Innovation and Design | C | 2 | Semester 2 with 1 week in Special Term |
| MA3006 Fluid Mechanics | C | 3 | MA2003 |
| MA3705 Aerospace Control Theory | C | 3 | Having Read MA2006 |
| HE2001 Intermediate Microeconomics | EC | 3 | |
| **Total** | | **17** | |
| | | | |

Curriculum for Double Degree Programme (DDP)
Bachelor of Engineering (Aerospace Engineering) and Bachelor of Social Science (Economics)
Students admitted from AY2020/2021

| | | | |
|---|---|---|---|
| **YEAR 3 SEMESTER 1** | | | |
| MA3003 Heat Transfer | C | 3 | MA2007 |
| MA3072 Mechanical Experiments | C | 1 | |
| MA3702 Aircraft Propulsion | C | 3 | MA2007 |
| MA3703 Flight Dynamics | C | 2 | MA2701 & MA3705 |
| MA3704 Aircraft Electrical Devices | C | 3 | |
| HE2005 Principles of Econometrics | EC | 3 | HE1005 |
| MA0218 Introduction to Data Science and Artificial Intelligence | GC | 3 | |
| **Total** | | **18** | |
| | | | |
| **YEAR 3 SEMESTER 2** | | | |
| MA3080 Professional Internship | C | 10 | Students may do MA3075 Professional Attachment in Year 2 Special Semester (5 AU) and UE courses in any semester (5 AU) instead of MA3080. |
| **Total** | | **10** | |
| | | | |
| **YEAR 4 SEMESTER 1** | | | |
| MA4701 Aircraft Design | C | 3 | MA3701,MA3702 & MA3703 |
| MA4702 Aircraft Structures II | C | 3 | MA2001,MA3700 & MA3701 |
| MA4705 Aircraft Navigation and Flight Computers | C | 3 | MH1811 |
| HE4010 Singapore Economy in a Globalized World | EC | 4 | HE2001 & HE2002 |
| Economics Elective 2 | EPE | 3 | |
| Economics Elective 3 | EPE | 3 | |
| **Total** | | **19** | |
| | | | |
| **YEAR 4 SEMESTER 2** | | | |
| HE3021 Intermediate Econometrics | EC | 3 | HE2005 |
| Economics Elective 4 | EPE | 3 | |
| Economics Elective 5 | EPE | 3 | |
| Economics Elective 6 | EPE | 3 | |
| Economics Elective 7 | EPE | 3 | |
| HW0288 Engineering Communication | GC | 2 | HW0188 |
| **Total** | | **17** | |
| | | | |
| **YEAR 5 SEMESTER 1** | | | |
| MA4079 Final Year Project | C | 4 | Year 4 standing, 2 semesters |
| MA4704 Aeroelasticity | C | 3 | MA3700 & MA3701 |
| Economics Elective 8 | EPE | 3 | |
| Economics Elective 9 | EPE | 4 | |
| Economics Elective 10 | EPE | 4 | |
| **Total** | | **18** | |
| | | | |
| **YEAR 5 SEMESTER 2** | | | |
| MA4079 Final Year Project | C | 4 | Year 4 standing, 2 semesters |
| MA48XX Major-PE 1 | PE | 3 | |
| MA48XX Major-PE 2 | PE | 3 | |
| Economics Elective 11 | EPE | 4 | |
| Economics Elective 12 | EPE | 3 | |
| **Total** | | **17** | |
| **GRAND TOTAL (Year 1 to 5)** | | **180** | |

updated: 03-06-20