

**CURRICULUM STRUCTURE 2011-2015
BACHELOR OF ENGINEERING (AEROSPACE)**

**Department of Aerospace Engineering
Faculty of Engineering, Universiti Malaysia Malaysia**

C – Credit, L –Lecture, P – Practical

Semester I					Semester II				
CODE	COURSE NAME	C	L	P	CODE	COURSE NAME	C	L	P
Year 1									
EAS 3101	Fortran Programming	3	2	1	EAS 3211	Thermofluids	3	3	0
EAS 3401	Aerospace Materials and Processes	2	2	0	EAS 3422	Aeromechanics I	3	3	0
EAS 3721	Engineering Drawing	2	1	1	EAS 3613	Aerospace Electrical and Electronics	3	2	1
ECC 3001	Engineering Mathematics I	3	3	0	ECC 3002	Engineering Mathematics II	3	3	0
EAB 3000	Workshop Management and Practice	1	0	1	PRT 2008	Agriculture and Man	2	2	0
SKP 2203	Islam and Asian Civilization	2	2	0	SKP 2204	Ethnic Relations	2	2	0
BBI 2420	Oral Interaction Skills	3	2	1					
	Credit	16	12	4		Credit	16	15	1
Year 2									
EAS 3202	Aerodynamics I	3	3	0	EAS 3102	Numerical Methods	2	2	0
EAS 3312	Vibration	2	2	0	EAS 3204	Aerodynamics II	3	3	0
EAS 3423	Aeromechanics II	3	3	0	EAS 3303	Control Systems	3	3	0
EAS 3611	Measurement and Sensors	2	2	0	EAS 3511	Aerothermodynamics	3	3	0
ECC 3003	Engineering Mathematics III	3	3	0	EAS 3921	Aerospace Laboratory I	1	0	1
SKP 2101	Malaysian Nationhood	3	3	0	ECC 3004	Engineering Statistics	3	3	0
Q** ****	Credit Co-curriculum ¹	1	0	1	BBI 2421	General Writing Skills	3	2	1
Q** ****	Credit Co-curriculum ¹	1	0	1					
	Credit	18	16	2		Credit	18	16	2
Year 3									
EAS 3205	Flight Mechanics	3	3	0	EAS 3103	Management of Aerospace and Agriculture Industry	2	2	0
EAS 3424	Aerospace Structures I	2	2	0	EAS 3304	Aircraft Stability and Control	3	3	0
EAS 3503	Propulsion	3	3	0	EAS 3406	Aeroelasticity	2	2	0
EAS 3612	Avionics	2	2	0	EAS 3425	Aerospace Structures II	3	3	0
EAS 3801	Space Mechanics	3	3	0	EAS 3712	Engineering Design	2	2	0
EAS 3922	Aerospace Laboratory II	1	0	1	EAS 3802	Satellite Technology	3	3	0
ECV 3001	Engineers and Society	3	2	1	EAS 3923	Aerospace Laboratory III	1	0	1
	Credit	17	15	2		Credit	16	15	1
Year 4									
EAS 3504	Space Launch Technology	3	3	0	EAS 3714	Aerospace Vehicle Design II	3	1	2
EAS 3713	Aerospace Vehicle Design I	3	1	2	MGM 3180	Basic Entrepreneurship	3	2	1
EAS 4999A	Final Year Project	2	0	2	EAS 4999B	Final Year Project	4	0	4
EAS 3924	Aviation Laboratory for Agriculture Application	1	0	1	EAS 4***	Elective III ³	3	3	0
EAS 4901	Industrial Training ²	5	0	5	EAS 4***	Elective IV ³	3	3	0
EAS 4***	Elective I ³	3	3	0					
EAS 4***	Elective II ³	3	3	0					
	Credit	20	10	10		Credit	16	9	7

NOTE

¹ Credit co-curriculum courses to be taken any time during the 4-year program.

² EAS 4901 (Industrial Training) conducted for 10 weeks during holiday after the end of the second semester of the 3rd year.

³ EAS 4*** (Technical Elective) based on the Option chosen. Option or elective courses offered are based on current needs.

Total Credit (Course)	132
Industrial Training	5
Total Credit ³	137

**TECHNICAL ELECTIVE COURSES
BACHELOR OF ENGINEERING (AEROSPACE)**

Technical elective courses are formed to fulfil the requirement of the programme objective of the Bachelor of Aerospace Engineering which is to prepare the graduates to compete and work in a world class industry or in the research industry and to develop the aerospace industry. The technical elective courses are offered based on the aeronautical and astronautical fields that are potentially identified in the aerospace industry.

It is compulsory for the student to choose two out of all technical elective courses offered for each semester and the proposed curriculum structure for technical electives is as followed:

**TECHNICAL ELECTIVE COURSES
BACHELOR OF ENGINEERING (AEROSPACE)**

Semester I					Semester II				
CODE	COURSE NAME	C	L	P	CODE	COURSE NAME	C	L	P
EAS 4401	Finite Element Analysis	3	3	0	EAS 4201	Computational Fluid Dynamics	3	3	0
EAS 4402	Failure Analysis	3	3	0	EAS 4202	Fundamentals of Helicopter Flight	3	3	0
EAS 4403	Experimental Stress Analysis	3	3	0	EAS 4301	Flight Dynamics	3	3	0
EAS 4501	Air Breathing Engine	3	3	0	EAS 4303	Automatic Flight Control Systems	3	3	0
EAS 4701	Inhabited Space Module	3	3	0	EAS 4502	Solid Propellant Propulsion	3	3	0
EAS 4801	Aerospace Software Engineering	3	3	0	EAS 4803	Spacecraft Dynamics and Control	3	3	0
					EAS 4804	Space Environment and Mission Analysis	3	3	0