

**King Fahd University of Petroleum & Minerals**  
**AEROSPACE ENGINEERING DEPARTMENT**

Table 1: The curriculum of the Aerospace Engineering Program with two options  
(Science and Applied)<sup>(1)</sup>

**FIRST YEAR (PREPARATORY YEAR)**

I					II				
Course	Title	LT	LB	CR	Course	Title	LT	LB	CR
ENGL 001	Preparatory English I	15	5	8	ENGL 002	Preparatory English II	15	5	8
MATH 001	Preparatory Math I	3	1	4	MATH 002	Preparatory Math II	3	1	4
ME 001	Preparatory Graphics	0	2	1	ME 002	Preparatory Workshop	0	2	1
PE 001	Prep. Physical Educ. I	0	2	1	PE 002	Prep. Physical Educ. II	0	2	1
		<u>18</u>	<u>10</u>	<u>14</u>			<u>18</u>	<u>10</u>	<u>14</u>

**SECOND YEAR (FRESHMAN)**

CHEM 101	Chemistry I	3	4	4	ENGL 102	English Composition II	3	0	3
ENGL 101	English Composition I	3	0	3	MATH 102	Calculus II	4	0	4
MATH 101	Calculus I	4	0	4	PHYS 102	Physics II	3	3	4
PHYS 101	Physics I	3	3	4	ICS 101	Computer Programming	2	3	3
IAS 111	Islamic Ideology	2	0	2	IAS 101	Arabic	2	0	2
PE 101	Physical Education I	0	2	1	PE 102	Physical Education II	0	2	1
		<u>15</u>	<u>9</u>	<u>18</u>			<u>14</u>	<u>8</u>	<u>14</u>

**THIR YEAR (SOPHOMORE)**

ENLG 214	Technical Report Writing	3	0	3	ME 201	Dynamics	3	0	3
MATH 201	Calculus	3	0	3	MATH 202	Diff. Equations	3	0	3
CE 201	Statics	3	0	3	CE 203	Structural Mechanics	3	0	3
ME 203	Thermodynamics I	3	0	3	ME 215	Mat. Sc. For ME	3	3	4
ME 210	Drawing & Graphics	2	3	3	AE <sup>(2)</sup> 220	Introduction to AE	3	0	3
PHYS 212	Modern Physics	3	0	3	IAS 211	Quran & Sunnah	2	0	2
		<u>17</u>	<u>3</u>	<u>18</u>	IAS 211	Quran & Sunnah	<u>2</u>	<u>0</u>	<u>2</u>
							<u>17</u>	<u>3</u>	<u>18</u>

**FOURTH YEAR (SUMMER): AE 399 SUMMER TRAINING (000)<sup>(4)</sup>**

**FOURTH YEAR (JUNIOR)**

EE 204	Circuits & Electrics	2	3	3	AE <sup>(2)</sup> 325	Gas Dynamics I	3	0	3
MATH 301	Method of Applied Math	3	0	3	AE <sup>(2)</sup> 328	Flight Structure I	3	0	3
STAT 319	Prob. & Statistics	2	3	3	AE <sup>(2)</sup> 333	Aerodynamics I	3	0	3
ME 311	Fluid Mechanics	3	0	3	XX XXX	T. Elective I	3	0	3
SE 301	Numerical Method	3	0	3	IAS 311	Islamic System	<u>2</u>	<u>0</u>	<u>2</u>
IAS 201	Arabic Terminology	2	0	2			<u>14</u>	<u>0</u>	<u>14</u>
		<u>15</u>	<u>6</u>	<u>17</u>					

**FIFTH YEAR (SENIOR)**

ME 413	System Dyn. & Control	2	3	3	AE <sup>(2)</sup> 412	Sr. Design Proj, II	2	0	2
AE <sup>(2)</sup> 411	Sr. Design Project	1	0	1	AE <sup>(3)</sup> 421	AE Lab II	0	3	1
AE <sup>(2)</sup> 420	AE Lab I	0	3	1	AE <sup>(3)</sup> 427	Aerospace Systm. Design	3	0	3
AE <sup>(2)</sup> 422	Flight Propulsion I	3	0	3	AE <sup>(3)</sup> 450	Compl. Method for AE	0	3	1
AE <sup>(2)</sup> 426	Flight Dynamics I	3	0	3	XX <sup>(5)</sup> XXX	T. Elective II	3	0	3
ECON 403	Eng'g. Economics	3	0	3	XX <sup>(5)</sup> XXX	T. Elective III	3	0	3
IAS 301	Technical Arabic	2	0	2	IAS 4XX	Islamic Elective	<u>2</u>	<u>0</u>	<u>2</u>
		<u>14</u>	<u>6</u>	<u>16</u>			<u>13</u>	<u>6</u>	<u>15</u>

**TOTAL CREDITS REQUIRED: 133**

**Notes:** (1) The science options as above, and the AE-Applied option is the same as AE-science option except that the 9-SCH for COOP course (AE 351) will replace the AE 399 (zero-SCH). AE 411 (I-SCH) AE 412 (2-SCH), and two technical electives (6-SCH), where the COOP will be taken one summer and semester. (2) Modified course. (3) New course, (4) One summer must be spent in industry. (5) The T. Electives will include AE Electives/Technical Electives from other Departments.