

B.S. in Aerospace Engineering (AE)

Four-year Academic Plan

Digital/Business Foundation



جامعة الملك فهد للبترول والمعادن
King Fahd University of Petroleum & Minerals

Freshman Year

Course	Type	Title	LT	LB	Cr	Course	Type	Title	LT	LB	Cr
CHEM 101	MS	General Chemistry I	3	4	4	ENGL 102	GS	Intro. to Report Writing	3	0	3
ENGL 101	GS	Intro. to Academic Discourse	3	0	3	IAS 111	GS	Belief & Its Consequences	2	0	2
IAS 121	GS	Language Foundation	2	0	2	ICS 104	DF	Intro. to Programm. In Python & C	2	3	3
MATH 101	MS	Calculus I	4	0	4	MATH 102	MS	Calculus II	4	0	4
PHYS 101	MS	General Physics I	3	3	4	PE 101	GS	Health and Physical Education I	0	2	1
						PHYS 102	MS	General Physics II	3	3	4
Total						Total					
15						14					
7						8					
17						17					

Sophomore Year

Course	Type	Title	LT	LB	Cr	Course	Type	Title	LT	LB	Cr
AE 211	CR	Fundamentals of Thermo-fluids	3	0	3	AE 221	CR	Introduction to AE	2	3	3
ENGL 214	GS	Academic & Professional Comm.	3	0	3	AE 228	CR	Introduction AE Struct. & Mat	3	0	3
IAS 212	GS	Professional Ethics	2	0	2	COE 292	DF	Intro. to Artificial Intelligence	3	0	3
ISE 291	DF	Intro. to Data Science	3	0	3	MATH 208	MS	Intro. to Diff. Eq. & Linear Algebra	3	0	3
MATH 201	MS	Calculus III	3	0	3	ME 201	CR	Dynamics	3	0	3
CE 201	CR	Statics	3	0	3						
Total						Total					
17						14					
0						3					
17						15					

Junior Year

Course	Type	Title	LT	LB	Cr	Course	Type	Title	LT	LB	Cr
ME 210	CR	ME Drawing and Graphics	2	3	3	AE 312	CR	Fundamentals of AE Design	1	0	1
AE 230	CR	AE Vehicle Performance	3	0	3	AE 325	CR	Gas Dynamics I	3	0	3
AE 313	CR	AE Systems and Control	2	3	3	AE 328	CR	Flight Structure I	3	0	3
AE 357	CR	AE Numerical Methods Lab	0	3	1	AE 333	CR	Aerodynamics I	3	0	3
MATH 371	MS	Intro. to Numerical Computing	3	0	3	BUS 200	DF	Business & Entrepreneurship	3	0	3
XXX xxx	EN	Engineering Elective	3	0	3	IAS xxx	GS	Islamic/Arabic Elective	2	0	2
						CGS 392	GS	Career Essentials	0	2	1
Total						Total					
13						15					
9						2					
16						16					

Summer Training

AE 399	CR	Summer Training	0	0	0
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Senior Year

Course	Type	Title	LT	LB	Cr	Course	Type	Title	LT	LB	Cr
AE 412	CR	Senior Design	2	0	2	AE 422	CR	Flight Propulsion I	3	0	3
AE 421	CR	AE Lab	0	3	1	AE 426	CR	Flight Dynamics I	3	0	3
AE xxx	CE	AE Elective I	3	0	3	AE 427	CR	Aerospace Vehicle Design	3	0	3
AE xxx	CE	AE Elective II	3	0	3	XXX xxx	FE	Elective I	3	0	3
GS xxx	GS	GS Elective	3	0	3	XXX xxx	FE	Elective II	3	0	3
XXX xxx	MS	Science Elective	3	0	3						
Total						Total					
14						15					
3						0					
15						15					

Total Credit Hours 128

MS	Math and Science	32
GS	General Studies	22
CR	Core Subjects	47
CE	Core Electives	6
EN	Engineering Electives	3
TE	Technical Electives	0
FE	Free Electives	6
DF	Digital/Business Foundation	12
Total		128
Total Core (CR+CE)		53
Total Engineering (Total Core+EN)		56