

B.S. in Mathematics
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
CHEM 101	MS	Principles of Chemical Science I	3	3	4
ENGL 101	GS	Intro. to Academic Discourse	3	0	3
PHYS 101	MS	General Physics I	3	3	4
MATH 101	MS	Calculus I	4	0	4
PE 101	GS	Health and Physical Education I	0	2	1
Total			13	8	16

Course	Type	Title	LT	LB	Cr
PHYS 102	MS	General Physics II	3	3	4
MATH 102	MS	Calculus II	4	0	4
ENGL 102	GS	Intro. to Argument Writing	3	0	3
IAS 111	GS	Belief & Its Consequences	2	0	2
ICS 104	DF	Intro. to Programm. in Python & C	2	3	3
Total			14	6	16

Sophomore Year

Course	Type	Title	LT	LB	Cr
MATH 201	MS	Calculus III	3	0	3
MATH 208	MS	Diff. Eq. & Linear Algebra	3	0	3
MATH 210	CR	Intro. to Sets and Structures	2	2	3
ENGL 214	GS	Academic & Professional Comm.	3	0	3
BUS 200	DF	Business & Entrepreneurship	3	0	3
Total			14	2	15

Course	Type	Title	LT	LB	Cr
MATH 225	CR	Intro. to Linear Algebra	3	0	3
MATH 371	CR	Intro. to Numerical Computing	2	2	3
STAT 201	MS	Prob. & Stat. for Eng. & Scientists	3	1	3
XXX xxx	MS	Science Elective	x	x	3
IAS 121	GS	Language Foundation	2	0	2
ISE 291	DF	Intro. to Data Science	3	0	3
Total			13	3	17

Junior Year

Course	Type	Title	LT	LB	Cr
MATH 333	CR	Methods of Applied Math I	3	0	3
MATH 341	CR	Advanced Calculus I	3	0	3
MATH 323	CR	Modern Algebra I	2	2	3
XXX xxx	FE	Free Elective	3	0	3
COE 292	DF	Intro. to Artificial Intelligence	3	0	3
Total			14	2	15

Course	Type	Title	LT	LB	Cr
MATH 441	CR	Advanced Calculus II	3	0	3
XXX xxx	CR	MATH 451 or STAT 301*	3	0	3
MATH xxx	CE	MATH Elective I	3	0	3
XE xxx	EN	Engineering Elective	3	0	3
IAS 212	GS	Professional Ethics and Governance	2	0	2
CGS 392	GS	Career Essentials	0	2	1
Total			14	2	15

MATH 399	CR	Summer Training	0	0	2
----------	----	-----------------	---	---	---

Summer Session

Senior Year

Course	Type	Title	LT	LB	Cr
MATH 413	CR	Senior Project I	0	1	0
MATH 445	CR	Intro. to Complex Variables	3	0	3
MATH xxx	CE	MATH Elective II	3	0	3
MATH xxx	CE	MATH Elective III	3	0	3
XXX xxx	TE	Technical Elective I	3	0	3
IAS xxx	GS	Islamic/Arabic Elective	2	0	2
Total			14	1	14

Course	Type	Title	LT	LB	Cr
MATH 414	CR	Senior Project II	0	6	3
MATH 453	CR	Intro. to Topology	3	0	3
MATH 490	CR	Seminar in Math	1	0	1
MATH xxx	CE	MATH Elective IV	3	0	3
XXX xxx	TE	Technical Elective II	3	0	3
GS xxx	GS	GS Elective	3	0	3
Total			13	6	16