

# BS in Mechanical Engineering

Study plan for students admitted to U of A beginning Spring 2022 and beyond. Course codes, names, equivalencies, unit amounts and terms are subject to change.

#### Year One

	Term One	Units
KEISER	ENC1101: English Composition I	3
	CHM1045: General Chemistry	3
	CHM1045L: General Chemistry Lab	1
SU	GMAT1313: Calculus I	3
	GENG1301: Introduction to Engineering	3
	Exploring Perspectives: Humanist (Select One)	3
	Total Units	16

	Term Two	Units
KEISER	ENC2102: English Composition II	3
	GMAT2603: Calculus II	5
	GSCI1305: General Physics with Calculus I	3
SU	GSCI1105L: General Physics with Calculus I Lab	1
50	<b>COMP1401</b> : Computer Programming for Engineering Applications	3
	MECH1101: MATLAB I	1
	GHUM1207: Kewarganegaraan	2
	Total Units	18

#### Year Two

	Term Three	Units
U of A	HED 102A: Succeeding as a Global Wildcat	0.5
	GMAT2308: Differential Equations	3
	MECH2306: Dynamics	3
	MECH2305: Thermodynamics	3
SU	MECH2308: Electrical Circuits + Laboratory	3
	MECH2232: Manufacturing Processes for ME	2
	MECH2104: Machine Shop	1
	Exploring Perspectives: Social Scientist (Select One)	3
	Total Units	18.5



	Term Four	Units
U of A	HED 102B: Succeeding as a Global Wildcat	0.5
	IENG2304: Engineering Economy	3
	IENG2305: Mathematical Foundations of IE	3
	IENG2103: Industrial Engineering Colloquium	1
SU	ENGR2302: Statics	3
	<b>IENG4319</b> : Human Side of Organizations (Building Connection 2)	3
	Exploring Perspectives: Social Scientist (Select One)	3
	Building Connections 3 (Select One)	3
	Total Units	18.5

## Year Three

	Term Five	Units
U of A	AME 301: Engineering Analysis	3
U 01 A	AME 331: Introduction to Fluid Mechanics	3
	MECH3309: Mechanical Behavior of Engr. Materials	3
SU	MECH3310: Fundamentals of Materials for Engineers	3
	MECH3111: Mechanics of Materials Laboratory	1
	ENGR3303: Environmental Ethics	3
	Building Connections 1 (Select One)	3
	Total Units	19

	Term Six	Units
U of A	AME 352: Dynamics to Machines	3
	AME 302: Numerical Methods	3
	MECH3315: Engineering Component Design	3
SU	MECH3316: Instrumentation Laboratory	3
	MECH3233: Mechatronics & Laboratory	2
	IENG3310: Technical Writing	3
	MECH3234: Mechanical Design Project	2
	Total Units	19

	Summer	Units
SU	STEM4301: Internship	3
	Total Units	3



### Year Four

	Term Seven	Units
U of A	AME 455: Control System Design	3
	AME 432: Heat Transfer	3
	AME 430: Intermediate Thermodynamics	3
SU	STEM4302: Senior Capstone I	3
	MECH4125: Senior Colloquium	1
	MECH4226: Senior Mechanical Lab	2
	Building Connections 2 (Select One)	3
	Total Units	18

	Term Eight	Units
U of A	AME 452: Planar Multibody Dynamics with Applications	3
	AME 460: Mechanical Vibrations	3
	AME 410: Additive Manufacturing	3
SU	STEM4303: Senior Capstone II	3
	GHUM1306: Basic Fundamentals of Drawing	3
	<b>Building Connections 3</b> (Select One)	3
	Total Units	18