

Bioresources and Agricultural Engineering

Study Plan

	Course Code	Course Title	Course Type	Pre-R	Co-R	Credit Hours	Contact Hours
Semester 1	ENL101	English for Academic Studies	UM	IEP099 or Equivalent	DPS095	3	3
	GEN150	Professionalism and Ethics	UM			3	3
	MAT101	Calculus I	UM	IMP099 or Equivalent		3	3
	PHY101	Physics I	UM		MAT101	3	3
	CHM101	Chemistry I	CM	IMP099 or Equivalent		3	3
	PHY105	Physics I Lab	CM		PHY101	1	3
	CHM105	Chemistry I Lab	CM		CHM101	1	3
<i>Total</i>						17	21
Semester 2	ENL102	English Composition	UM	ENL101 DPS095		3	3
	INF120	Computers and Information Systems	UM	DPS095		3	3
	MAT102	Calculus II	CM	MAT101		3	3
	PHY102	Physics II	CM	PHY101 MAT101		3	3
	PHY107	Physics II Lab	CM	PHY105	PHY102	1	3
	MAT202	Linear Algebra	CM	MAT101		3	3
<i>Total</i>						16	18
Semester 3	XXXX	Global Citizen (Elective)	UM			3	3
	BIO101	Biology	PM	IMP099 or Equivalent		3	3
	MAT201	Calculus III	CM	MAT102		3	3
	MAT240	Differential Equations	CM	MAT102		3	3
	ENG205	Electrical and Electronic Circuits	CM	PHY102 MAT102		3	3
	ENG209	Statics and Strength of Materials	CM	PHY102 CHM101		3	3
<i>Total</i>						18	18

	Course Code	Course Title	Course Type	Pre-R	Co-R	Credit Hours	Contact Hours
Semester 4	HST101	Islamic Culture and Values	UM			3	3
	ENL201	Writing and Research	UM	ENL102		3	3
	ESE211	Industrial Electronics	PM	ENG205		3	3
	ENG207	Programming	CM	MAT202		3	3
	ENG208	Introduction to Energy and Sustainability	CM	PHY102 CHM105		3	3
	ENG206	Electrical and Electronic Circuits Lab	CM	ENG205 PHY107		1	3
Total						16	18

Semester 5	XXXX	Arts and Humanities Elective Group I	UM			3	3
	ENG308	Numerical Methods	CM	MAT202 MAT240		3	3
	ENG304	Engineering Probability & Statistics	CM	MAT102		3	3
	BAE101	Introduction to Bioresources and Agriculture Engineering	PM	BIO101	BAE102	3	3
	BAE102	Introduction to Bioresources and Agriculture Engineering Lab	PM		BAE101	1	3
	BAE230	Mechanical Systems in Agriculture I	PM	ENG209	BAE231	3	3
	BAE231	Mechanical Systems in Agriculture I Lab	PM		BAE230	1	3
Total						17	21

Semester 6	XXXX	Arts and Humanities Elective Group II	UM			3	3
	XXXX	Innovation and Creativity (Elective)	UM			3	3
	BAE320	Agricultural Structures Planning	PM	PHY102 CHM101		3	3
	BAE330	Mechanical Systems in Agriculture II	PM	BAE230	BAE331	3	3
	BAE331	Mechanical Systems in Agriculture II Lab	PM		BAE330	1	3
	ENG309	Engineering Project Management and Economics	CM	ENG207 ENG208		3	3
Total						16	18

	Course Code	Course Title	Course Type	Pre-R	Co-R	Credit Hours	Contact Hours
Semester 7	BAE490	Capstone Design 1	PM	Pass 96 CH		3	3
	BAE450	Agricultural Robotics and Automation	PM	ENG205	BAE451	3	3
	BAE451	Agricultural Robotics and Automation Lab	PM		BAE450	1	3
	BAE360	Bioresource Engineering	PM	BAE101 ENG208		3	3
	BAE340	Microbiology and Food Safety	PM	CHM101 BIO101	BAE341	3	3
	BAE341	Microbiology and Food Safety Lab	PM		BAE340	1	3
<i>Total</i>						14	18

Semester 8	BAE491	Capstone Design 2	PM	BAE490		3	3
	BAE430	Mechanical Systems in Agriculture III	PM	BAE330		3	3
	BAE310	Remote Sensing Data and Methods	PM	MAT201		3	3
	XXXX	Program Elective	PE	Prerequisite Program Elective		3	3
	XXXX	Program Elective	PE	Prerequisite Program Elective		3	3
	XXXX	Program Elective	PE	Prerequisite Program Elective		3	3
<i>Total</i>						18	18

Note that the University Mandatory (UM), College Mandatory (CM), Program Mandatory (PM), and Program Elective (PE) courses