



Department Of
Computer Engineering

Department Of
Computer Science

Course Catalog

Computer Engineering

Total Hours: 134

Freshman Program

<i>First Semester</i>	<i>Hours</i>
ALIS 1211: Arabic Language / Islamic Studies	2
COMM 2311: Oral Communications	3
COMM 1311: Written Communication.....	3
UNIV 1211: Professional Development and Competencies.....	2
MATH 1422: Calculus I	4
GEIT 1411: Computer Science I.....	4
Total Hours:	18

<i>Second Semester</i>	<i>Hours</i>
ALIS 1212: Arabic Language / Islamic Studies	2
PHED 1111: Physical Education	1
COMM 1312: Writing and Research.....	3
UNIV 1212: Critical Thinking and Problem Solving	2
PHYS 1421: Physics for Engineers I.....	4
MATH 1423: Calculus II.....	4
GEIT 1412: Computer Science II	4
Total Hours:	20

Sophomore Program

<i>First Semester</i>	<i>Hours</i>
ALIS 2211: Arabic Language / Islamic Studies	2
ASSE 2111: Learning Outcome Assessment.....	1
PHED 1112: Physical Education	1
UNIV 1213: Leadership and Teamwork.....	2
MATH 1324: Calculus III.....	3
GEIT 2291: Professional Ethics.....	2
PHYS 1422: Physics for Engineers II.....	4
Total Hours:	15

<i>Second Semester</i>	<i>Hours</i>
ALIS 2212: Arabic Language / Islamic Studies	2
COMM 2312: Technical and Professional Communications	3
COEN 2311: Circuits I.....	3
COEN 2111: Circuits Lab.....	1
GEIT 1311: Computer Organization	3
MATH 2332: Differential Equations	3
Social Science Elective*	3
Total Hours:	18

**Select any Social Science course from the College Core Curriculum.*

Junior Program

<i>First Semester</i>	<i>Hours</i>
TBD.....	2
ASSE 3211: Learning Outcome Assessment II.....	2
COEN 3323: Digital Systems	3
GEIT 3341: Database Design	3
COEN 3312: Circuits II	3
COEN 3421: Electronics I	4
Total Hours:	17

<i>Second Semester</i>	<i>Hours</i>
TBD.....	2
GEIT 3351: Software Engineering I.....	3
COEN 3322: Signals and Systems.....	3
MATH 2331: Linear Algebra	3
ITAP 2431: Network Management.....	4
Lab Science Elective*	4
Total Hours:	19

**Select any Chemistry or Biology course from the College Core Curriculum.*

Senior Program

<i>First Semester</i>	<i>Hours</i>
TBD.....	2
GEIT 4351: Software Engineering II.....	3
ITAP 3431: Network Security	4
COEN 4322: Digital Signal Processing.....	3
EE or IT Elective*	3
Total Hours:	15

**Select any 4000-level course from Electrical Engineering or Information Technology*

<i>Second Semester</i>	<i>Hours</i>
ASSE 4311: Learning Outcome Assessment III (Capstone)	3
EE or IT Elective*	3
EE or IT Elective*	3
Social Science Elective**	3
Total Hours:	12

*Select any 4000-level course from Electrical Engineering or Information Technology

**Select any Social Science course from the College Core Curriculum.

Computer Science

Total Semester Credit Hours: 136

Freshman Program

<i>First Semester</i>	<i>Hours</i>
ALIS 1211: Arabic Language / Islamic Studies	2
COMM 2311: Oral Communications	3
COMM 1311: Written Communication	3
UNIV 1211: Professional Development and Competencies	2
MATH 1422: Calculus I	4
GEIT 1411: Computer Science I	4
Total Hours:	18

<i>Second Semester</i>	<i>Hours</i>
ALIS 1212: Arabic Language / Islamic Studies	2
PHED 1111: Physical Education	1
COMM 1312: Writing and Research	3
UNIV 1212: Critical Thinking and Problem Solving	2
MATH 1423: Calculus II	4
GEIT 1412: Computer Science II	4
GEIT 1311: Computer Organization	3
Total Hours:	19

Sophomore Program

<i>First Semester</i>	<i>Hours</i>
ALIS 2211: Arabic Language / Islamic Studies	2
ASSE 2111: Learning Outcome Assessment I	1
PHED 1112: Physical Education	1
UNIV 1213: Leadership and Teamwork	2
PHYS 1421: Physics for Engineers I	4
MATH 1313: Statistical Methods	3

MATH 1324: Calculus III.....	3
Total Hours:	16

<i>Second Semester</i>	<i>Hours</i>
ALIS 2212: Arabic Language / Islamic Studies	2
COMM 2312: Technical and Professional Communications	3
COSC 2331: Discrete Structures	3
PHYS 1422: Physics for Engineers II.....	4
GEIT 3341: Database Design	3
Social Science Elective*	3
Total Hours:	18

**Select any Social Science course from the College Core Curriculum.*

Junior Program

<i>First Semester</i>	<i>Hours</i>
TBD.....	2
ASSE 3211: Learning Outcome Assessment II.....	2
MATH 2332: Linear Algebra	3
COSC 3411: System Programming	4
COSC 3421: Data Structures	4
GEIT 2291: Professional Ethics.....	2
Total Hours:	17

<i>Second Semester</i>	<i>Hours</i>
TBD.....	2
GEIT 3351: Software Engineering I.....	3
COSC 3343: Database Theory.....	3
COSC 3351: Algorithms.....	3
MATH 2332: Differential equations.....	3
Natural Science Elective*	4
Total Hours:	18

**Select any Natural Science course from the College Core Curriculum.*

Senior Program

<i>First Semester</i>	<i>Hours</i>
TBD.....	2
GEIT 4351: Software Engineering II.....	3
COSC 4361: Operating Systems.....	3
COSC 4461: Programming Languages.....	4
IT Elective*	3
Total Hours:	15

**Select any course from COEN 4331: Network Theory, COSC 4311: Parallel Computing, COCS 4364: Compilers, ITAP 4341: Database Management, ITAP*

4372: e-Collaboration, or GEIT 4361: Practical Training.
Second Semester Hours

ASSE 4311: Learning Outcome Assessment III (Capstone)	3
COSC 4362: Artificial Intelligence	3
COSC 4363: Automata Theory.....	3
Social Science Elective**	3
IT Elective*	3
Total Hours:	15

**Select any course from COEN 4331: Network Theory, COSC 4311: Parallel Computing, COCS 4364: Compilers, ITAP 4341: Database Management, ITAP 4372: e-Collaboration, or GEIT 4361: Practical Training.*

***Select any Social Science course from the College Core Curriculum.*