

DEPARTAMENT OF COMPUTER SCIENCE AND ENGINEERING

BS Software Engineering



First Semester

First Year

Second Semester

Course Code	Course Title	Prerequisites	Cr	Course Code	Course Title	Prerequisites	Cr
*MATE 3031	Calculus I	MATE 3005 or MATE 3143 or MATE 3172 or MATE 3174	4	MATE 3032	Calculus II	MATE 3031	4
QUIM 3131	General Chemistry I		3	QUIM 3132	General Chemistry II	QUIM 3131 and (QUIM 3133 or QUIM 3001)	3
QUIM3133	Gen Chemistry Lab I		1	QUIM 3134	Gen Chemistry Lab II	QUIM 3133 and (QUIM 3131 or QUIM 3001) QUIM 3132(corequisite)	1
**INGL 3---	English First Year		3	**INGL 3---	English First Year		3
**ESPA 3101	Spanish I Basic		3	**ESPA 3102	Spanish I Basic II	ESPA 3101	3
CIIC 3011	Intro. to Computer Programming I		3	CIIC 4010	Advanced Programming	CIIC 3011 or INGE 3016	4
			Total Credits				Total Credits
			17				18

First Semester

Second Year (BS)

Second Semester

Course Code	Course Title	Prerequisites	Cr	Course Code	Course Title	Prerequisites	Cr
MATE 3063	Calculus III	MATE 3032	3	CIIC 4020	Data Structures	(CIIC 4010 or ICOM4015) and (CIIC 3075 or ICOM 4075) and MATE 3031	4
FISI 3171	Physics I	Mate 3031 or Mate 3144	4	FISI 3172	Physics II	FISI 3171	4
FISI 3173	Physics Lab I	FISI 3171 (corequisite)	1	FISI 3174	Physics Lab II	FISI 3173 FISI 3172- (corequisite)	1
INGE 3011	Engineering Graphics		2	INEL 3105	Electrical Systems Analysis I	MATE 3032 Coreq: FISI 3172 and MATE 3063	3
CIIC 3075	Foundations of Computing	CIIC 3011 or INGE 3016 Coreq: MATE3031	3	INEL 4115	Electrical Measurements Lab	INEL 3105 (corequisite)	1
**INGL 3---	English Second Year		3	**INGL 3---	English Second Year		3
			Total Credits				Total Credits
			16				16

First Semester

Third Year (BS)

Second Semester

Course Code	Course Title	Prerequisites	Cr	Course Code	Course Title	Prerequisites	Cr
INSO 4101	Intro to Software Engineering	CIIC 4020 or ICOM 4035	3	CIIC 4025	Algorithm Design and Analysis	CIIC 4020 o ICOM 4035	3
CIIC 3081	Computer Archietcture I	INEL 3105 & (CIIC 4010 or ICOM 4015)	3	CIIC 4082	Computer Archietcture II	CIIC 3081	3
MATE 4145	Lineal Algebra and Differential Equations	MATE 3063 and (CIIC 3011 or INGE 3016)	4	INSO 4115	Software Requirements	ICOM 4009 or INSO 4101	3
INGE 3035	Engineering Mechanics	MATE 3031 or MATE 3144 or MATE 3183 FISI3171(coreq)	3	ININ 4010	Engineering Probability and Statistics	INGE 3016 and MATE 3032	3
----	Socio-Humanistic Elective		3	----	Socio-Humanistic Elective		3
			Total Credits				Total Credits
			16				15



DEPARTAMENT OF COMPUTER SCIENCE AND ENGINEERING

BS Software Engineering

First Semester

Fourth Year (BS)

Second Semester

Course Code	Course Title	Prerequisites	Cr		Course Code	Course Title	Prerequisites	Cr
CIIC 4050	Operating Systems	(ICOM 4035 or CIIC 4020) and (CIIC 4082 or INEL 4206)	4		CIIC 4060	Database Systems	(ICOM 4035 or CIIC 4020) Co-Req. (ICOM 5007 or CIIC 4050)	3
CIIC 4030	Programming Languages	CIIC 4020 or ICOM 4035	3		CIIC 4070	Computer Networks and the WWW	ICOM 5007 or CIIC 4050	3
INSO 4116	Software Design	INSO 4115	3		INSO 4117	Software Testing	INSO 4116	3
ININ 4015	Engineering Economics	MATE 3032	3		INME 4045	Thermodynamics	FISI 3172 and QUIM 3002 or QUIM 3132 and QUIM 3134	3
----	Socio-Humanistic Elective		3		----	Socio-Humanistic Elective		3
Total Credits			16		Total Credits			15

First Semester

Fifth Year (BS)

Second Semester

Course Code	Course Title	Prerequisites	Cr		Course Code	Course Title	Prerequisites	Cr
INSO 4151	Software Engineering Project	INSO 4117	3		INSO 5xxx CIIC 5xxx	Technical Elective***		3
INGE 3045	Engineering Materials	QUIM 3002 or QUIM 3132 and QUIM 3134 FISI 3172- (corequisite)	3		INSO 5xxx CIIC 5xxx	Technical Elective***		3
-----	Free Elective		3		-----	Free Elective		3
-----	Free Elective		3		-----	Free Elective		3
EDFI -----	Physical Education Elective		1		EDFI ----	Physical Education Elective		1
Total Credits			13		Total Credits			13

Total Credits BS: 155

***** Approved Technical Electives**

CIIC 4019	High Performance Computing	CIIC 5018	Cryptography and Network Security
INSO 4111	Intro to Computer Human Interaction	CIIC 5015	Artificial Intelligence
INSO 4118	Software Project Management	CIIC 5017	Operating Systems and Network Administration and Security
INSO 4998	Undergraduate Research in Software Engineering	CIIC 5029	Compiler Design
CIIC 5995	Selected Topics in Computer Science and Engineering	CIIC 4998	Undergraduate Research in Computer Science and Engineering