

COMPUTER ENGINEERING CURRICULUM

FIRST YEAR

First semester					Second semester				
Code	Course	prerequisite or co-requisite	Cr	N	Code	Course	prerequisite or co-requisite	Cr	N
INGE 3011	Engineering Graphics I.		2		MATE 3031	Calculus I.	Engineering Graphics I.	4	
ESPA 3131 ESPA 3101	Académic Literacy I Basic course in spanish I.		3		ESPA 3132 ESPA 3102	Académic Literacy I Basic course in spanish II.	ESPA 3131 ESPA 3101	3	
INGL XXXX	First year English		3		INGL XXXX	First year English		3	
	ETHICS ELECTIVE		3		ICOM 4075	Fundations of Computing	Co-INGE 3016	3	
INGE 3016	Algorithms and Computer Program		3		INEL 4205	Logic Circuits	INGE 3016	3	
ICOM 3007	Profesional Practical preparation		1						
			15					16	

SECOND YEAR

Code	Course	prerequisite or co-requisite	Cr	N	Code	Course	prerequisite or co-requisite	Cr	N
MATE 3032	Calculus II	MATE 3031 ó MATE 3144 ó 3183	4		MATE 4031	Algebra Lineal	Linear Algebra	3	
FISI 3171	Physics I.	MATE 3031 ó MATE 3144 ó 3183	4		FISI 3172	Physics II.	FISI 3171	4	
FISI 3173	Physics Lab I.	Co- FISI 3171	1		FISI 3174	Physics Lab. II	FISI 3173, Co-Fisi 3172	1	
ICOM 4015	Advance Program	INGE 3016	4		EDFI XXXX	Physical Education		1	
INEL 4206	Microprocessors Embedded Systems	INEL 4205	3		ICOM 4035	Data Structures	ICOM 4015, MATE 3031, ICOM 4075	4	
					ICOM 4215	Computer Architect and Organization	INEL 4206	3	
			16					16	

THIRD YEAR

Code	Course	prerequisite or co-requisite	Cr	N	Code	Course	prerequisite or co-requisite	Cr	N
MATE 3063	Calculus III	MATE 3032	3		MATE 4009	Ord. Difference Equations	MATE 3063	3	
INEL 3105	Electrical Systems Analysis I.	MATE 3032, INGE 3016 Co-FISI 3172, MATE 3063	3		INEL 4102	Electrical Systems Analysis II.	INEL 3105, FISI 3172, INGE 3016 Co-MATE 4009	3	
INEL 4115	Lab de Medidas Electrónica	Co-INEL3105	1		INEL 4201	Electronics I.	INEL 3105 FISI 3172	3	
INGL XXXX	Second year English		3		INEL 4211	Electronics Lab. I.	INEL 4115 Co-INEL4201	1	
EDFI XXXX	Physical Education		1		INGL XXXX	Second year english		3	
	ELECTIVE FREE		3			SOCIO HUMANISTICS ELECTIVE		3	
			14					16	

FOURTH YEAR

Code	Course	Prerequisite or co-requisite	Cr	N	Code	Course	Pre or Co-Requisite	Cr	N
INEL 4095	Signals and systems	INEL 4102 and MATE 4009			ICOM 4217	Embedded Systems Design	INEL 4206. And INEL 4207 or INEL4218 or DIR		
INEL 4218	Integrated Circuit Eng.	INEL 4201 and INEL 4205			ICOM 4047	Operating Systems Programming	ICOM 4035 and INEL 4206 and Co-ININ 4010		
INEL4308	Network routing fundamental	MATE 3063 or Dir			QUIM 3171	Gen. Chem. For Eng. Students	Co-QUIM3172 and MATE 3171 or MATE 3005		
ININ 4010	Probability and Statistics for Eng.	INGE 3016 and MATE 3032			Quim 3172	Gen. Chem. Lab. Eng Students	Co-QUIM 3171 and MATE 3171 or MATE 3005		
	FREE ELECTIVE								

FIFTH YEAR

Code	Course	Pre or Co-Requisite	Cr	N	Code	Course	Prerequisite or co-requisite	Cr	N
ICOM 4145	Plan and distribution Cyber Physical Systems	ICOM4035 INEL4206 ICOM4308	4		ICOM 4990	Computer Eng. Design Project CAPSTONE	ICOM4047, ICOM4145, ICOM4217, (INEL4301 INEL4095)	3	
ININ 4015	Engineering Economic Analysis	MATE 3032	3			SOCIO HUMANISTICS ELECTIVE		3	
	FREE ELECTIVE		3			FREE ELECTIVE		3	
ICOM/INEL	TECHNICAL ELECTIVE		6		ICOM/INEL	TECHNICAL ELECTIVE		3	
			16					12	

FREE ELECTIVE (12 credits)

SOCIO HUMANISTICS ELECTIVE (9 credits)

[illegible]

TECHNICAL ELECTIVE (9 credits)

[illegible]

CURRICULUM 149 CREDITS

- (1) Refer to the information related to Location in the English sequence.
- (2) The ICOM curriculum requires a total of 9 credits in TECHNICAL or professional ELECTIVES within the areas of emphasis designated by the committee. Technical electives must be selected from the list of courses approved for each area.
- (3) The 9 credits in SOCIO-HUMANISTIC ELECTIVES shall be selected by the student from the list of courses recommended by the faculty. REQUIRED: Ethics elective – select from the generated list.
- (4) A total of 12 credits of FREE ELECTIVES is required.

The department may make changes to course requirements. Please consult the university catalog or check with academic advisors before registering for any course about which you have questions.

REQUIREMENTS FOR THE ICOM 4990 COURSE “CAPSTONE”

The student must take all core courses, as well as one software and one hardware course from the list: ICOM4047, ICOM4145, ICOM4217, (*INEL4301 or INEL4095) (* INEL 4301: Have approved INEL 4102 and ININ 4010)

Students should consult with academic advisors to verify the requirements for current areas of emphasis. With the necessary written approval from the professor in charge of the course(s), students may apply up to three (3) credits toward: Undergraduate Research (INEL/ICOM 4998) or Special Problems (INEL 5995).

You may also use technical courses from other areas of emphasis as technical electives outside your chosen area of emphasis. Please note that each of these areas has its own specific requirements. Students may choose zero (none), one (1), or more of these areas. It is important to emphasize that students are not required to select an area of emphasis for graduation purposes. Students should consult with academic advisors to verify the current requirements for the areas of emphasis.

Signature of the academic advisor
Eunice Olivero y/o Maritza Figueroa

Student's Signature

Email:

eunice.olivero@upr.edu , maritza.figueroa1@upr.edu

Phone Number:

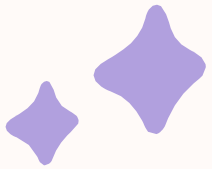
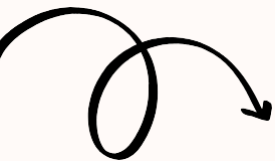
787-832-4040 ext. 3182, 3086, 6545, 3090, 3821



CURSOS DE ELECTIVAS EN ÉTICA ACEPTADAS POR LA FACULTAD DE INGENIERIA / ICOM

	Curso	Descripción	Crs	Prerequisitos
ADMI	ADMI 3009	Introducción a los Negocios, Gerencia y Ética	3	
FILOSOFIA	FILO 3005	**Ética I (UPR Ponce, Arecibo y Humacao) Equivalente a Filo 3155 (RUm)	3	
	FILO 3155	Introducción a la Ética	3	
	FILO 3156	Ética Moderna y Contemporánea	3	
	FILO 3178	Ética Empresarial	3	

CURSOS DE ELECTIVAS EN ÉTICA ACEPTADAS POR LA FACULTAD DE INGENIERIA / ICOM



	Curso	Descripción	Crs	Prerequisitos
FILOSOFIA	FILO 3185	La Etica y la Computadora	3	
	FILO 3185	**Ética en la Computadora (UPR Ponce) Equivalente a Filo 3185 (RUM)	3	
	FILO 3195	Etica Perspectiva Global	3	
	FILO 4025	Etica Medica	3	
	FILO 4026	Etica Feminista	3	

CURSOS DE ELECTIVAS EN ÉTICA ACEPTADAS POR LA FACULTAD DE INGENIERIA / ICOM

	Curso	Descripción	Crs	Prerequisitos
FILOSOFIA	FILO 4027	Bioética	3	
	FILO 4028	** Bioética (UPR Ponce) Equivalente a Filo 4027 (RUM)	3	
	FILO 4045	Ética de la Ingeniería	3	
	FILO 4046	Ética Ambiental	3	
	FILO 4155	Ética Avanzada	3	FILO 3155

CURSOS DE ELECTIVAS EN ÉTICA ACEPTADAS POR LA FACULTAD DE INGENIERIA / ICOM

	Curso	Descripción	Crs	Prerequisitos
FILOSOFIA	FILO 4160	Filosofía de la Tecnología	3	
REHU	REHU 4005	**Etica Comercial (UPR Humacao) Equivalente a ADMI 3009 (RUM)	3	
SOCI	SOCI 3007	Introducción ala Sociología Ambiental	3	
	SOCI 3010	Aspectos Sociales del Cambio Climático	3	
	SOCI 4027	Desigualdad Ambiental	3	

CURSOS DE ELECTIVAS EN ÉTICA ACEPTADAS POR LA FACULTAD DE INGENIERIA / ICOM

	Curso	Descripción	Crs	Prerequisitos
SOCI	SOCI 4157	Tecnología y Sociedad	3	
	SOCI 5015	Energía, Ambiente y Sociedad	3	

