

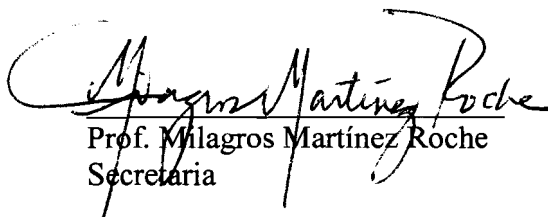


CONSEJO ACADÉMICO

CERTIFICACIÓN CA #06-06

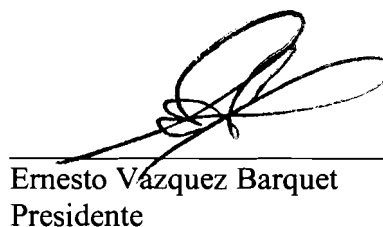
Yo, Milagros Martínez Roche, Secretaria del Consejo Académico de la Universidad Politécnica de Puerto Rico, certifico que en la reunión celebrada el lunes, 7 de agosto de 2006, debidamente convocada y con el quórum correspondiente, se aprobó que el curso SCIE 1110 (General Biology) será eximido para aquellos estudiantes de Ingeniería Química que ya han tomado el curso en Escuela Superior o en otra institución universitaria.

Esta política entrará en efecto inmediatamente.



Prof. Milagros Martínez Roche
Secretaria

rma



Ernesto Vázquez Barquet
Presidente

PO Box 192017
San Juan, Puerto Rico
00919-2017

Ave. Ponce de León 377
Hato Rey, Puerto Rico 00918

Tel. (787) 754-8000
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Esta Certificación sustituye a la CA#06-06, circulada anteriormente.



CONSEJO ACADÉMICO


CERTIFICACIÓN CA #05-06

Yo, Milagros Martínez Roche, Secretaria del Consejo Académico de la Universidad Politécnica de Puerto Rico, certifico que en la reunión celebrada el lunes, 7 de agosto de 2006, debidamente convocada y con el quórum correspondiente, se aprobó que para toda área nueva que se integre a un programa que ya fue aprobado por el Consejo de Educación Superior, debe someterse una propuesta nueva ante esta Agencia para su consideración.



Prof. Milagros Martínez Roche
Secretaria

rma



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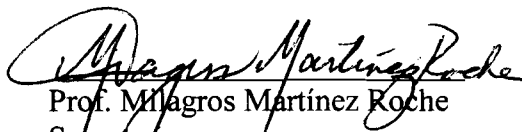


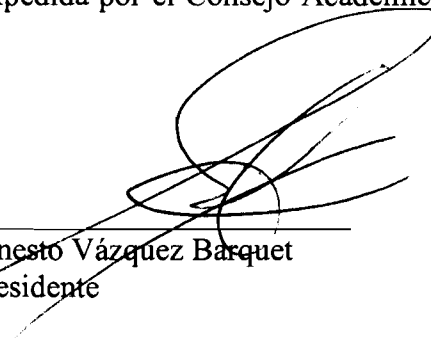
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CERTIFICACIÓN CA #04-06

Yo, Milagros Martínez Roche, Secretaria del Consejo Académico de la Universidad Politécnica de Puerto Rico, certifico que en la reunión celebrada el lunes, 7 de agosto de 2006, debidamente convocada y con el quórum correspondiente, se aprobó que por instrucciones del Consejo de Educación Superior de PR, todas las Áreas de Interés a nivel de bachillerato y programas de maestría serán sustituidas por **concentraciones** y **especialidades** respectivamente, como se conocía anteriormente.

Esto deja sin efecto la Certificación CA#06-03, expedida por el Consejo Académico en reunión del viernes, 20 de junio de 2003.


Prof. Milagros Martínez Roche
Secretaria


Ernesto Vázquez Barquet
Presidente

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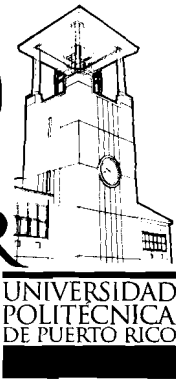
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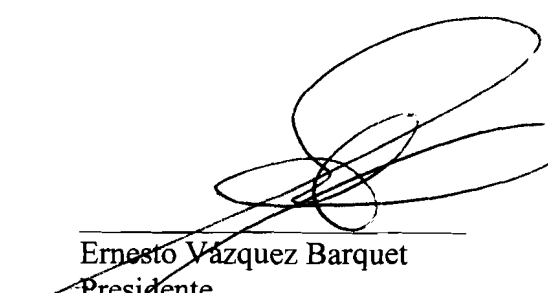
CERTIFICACIÓN CA #03-06

Yo, Milagros Martínez Roche, Secretaria del Consejo Académico de la Universidad Politécnica de Puerto Rico, certifico que en la reunión celebrada el lunes, 7 de agosto de 2006, debidamente convocada y con el quórum correspondiente, se aprobó lo siguiente:

1. Es responsabilidad del Director del Departamento y el Coordinador, informar a Registro sobre los cambios curriculares y de revisar el catálogo siempre que se apruebe un cambio curricular de su correspondiente Departamento.
2. La Oficina de Registraduría es responsable de dar el visto bueno para que la Oficina de Comunicaciones, a través del Web Master, proceda a añadir o modificar cualquier cambio curricular en el Catálogo correspondiente, una vez aprobado por este Consejo.


Prof. Milagros Martínez Roche
Secretaria

rma


Ernesto Vázquez Barquet
Presidente

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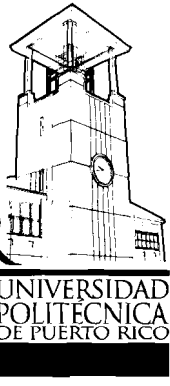
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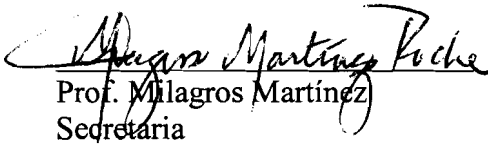
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**CERTIFICACIÓN
CA #02-06**

Yo, Milagros Martínez, Secretaria del Consejo Académico de la Universidad Politécnica de Puerto Rico, certifico que en la reunión celebrada el lunes, 7 de agosto de 2006, debidamente convocada y con el quórum correspondiente, se aprobaron los cambios curriculares del Programa de Ingeniería Química, según se explica en el documento adjunto.

Dichos cambios son efectivos en el trimestre 06/FA.


Prof. Milagros Martínez
Secretaria


Ernesto Vázquez Barquet
Presidente

rma

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**CAMBIOS CURRICULARES
DEPARTAMENTO DE INGENIERIA QUIMICA**

**RESUMEN DE CAMBIOS AL CURRICULO Y SECUENCIAL
FALL 2006**

Cursos eliminados:

Curso	Título de curso	Créditos	Pre-requisitos	Co-requisitos
CHE 3114	MOMENTUM TRANSFER OPERATIONS	4	CHE 3106, ENGI 2110	
CHE 4112	HEAT TRANSFER OPERATIONS	4	CHE 3104, CHE 3116, CHE 4118	
CHE 4126	CHEMICAL ENGINEERING KINETICS AND CATALYSIS	4	CHE 4110, CHE 4114, SCIE 2230	CHE 4120
CHE 4124	MASS TRANSFER OPERATIONS	4	CHE 4110, CHE 4112, SCIE 2230, SCIE 2231	
CHE 3112	CHEMICAL ENGINEERING THERMODYNAMICS I	3	MATH 3310, SCIE 3210, SCIE 3211, CHE 3106	SCIE 3220, SCIE 3221
CHE 4118	APPLIED NUMERICAL ANALYSIS IN CHEMICAL ENGINEERING	3	MATH 3310, ENGI 2310, CHE 3100	

Cursos añadidos:

Curso	Título de curso	Créditos	Pre-requisitos	Co-requisitos
CHE 1510	INTRODUCTION TO CHEMICAL ENGINEERING	3	ENGI 1130	SCIE 1214
CHE 3104	THERMODYNAMICS	3	MATH 3310, SCIE 3210	CHE 3100
CHE 3116	FLUID MECHANICS FOR CHEMICAL ENGINEERING	3	CHE 3106, ENGI 2110	
CHE 3118	APPLIED MATHEMATICS IN CHEMICAL ENGINEERING	3	MATH 3310, ENGI 2310, CHE 3100	CHE 3106
CHE 4114	HEAT TRANSFER	3	CHE 3104, CHE 3116	CHE 3118
CHE 4120	MASS TRANSFER OPERATIONS I	3	CHE 4110, CHE 4114	
CHE 4128	CHEMICAL REACTION ENGINEERING	3	CHE 4110, CHE 4114, SCIE 2230	CHE 4120
CHE 4130	MASS TRANSFER OPERATIONS II	3	CHE 4120	
CHE 5930	CHEMICAL ENGINEERING SEMINAR	1		CHE 5916

Cursos añadidos como electivos en Ingeniería Química:

Curso	Título de curso	Créditos	Pre-requisitos	Co-requisitos
CHE 5320	FUNDAMENTALS OF INDUSTRIAL HYGIENE	3	SCIE 1214 or SCIE 1210	CAPSTONE COURSE

Curso eliminado como electivo en Ingeniería Química:

Curso	Título de curso	Créditos	Pre-requisitos	Co-requisitos
CHE 5218	ENVIRONMENTAL LAWS AND REGULATIONS	3	CHE 5916	

Cursos con cambios de título:

Curso	Título nuevo del curso	Créditos
CHE 3100	BASIC PRINCIPLES OF CHEMICAL ENGINEERING I	3
CHE 3106	BASIC PRINCIPLES OF CHEMICAL ENGINEERING II	3
CHE 4110	CHEMICAL ENGINEERING THERMODYNAMICS	3
CHE ****	CHEMICAL ENGINEERING DESIGN ELECTIVE	3

Cursos con cambios de pre-requisitos y co-requisitos:

Curso	Título de curso	Créditos	Pre-requisitos	Co-requisitos
CHE 3100	BASIC PRINCIPLES OF CHEMICAL ENGINEERING I	3	MATH 2340, ENGI 2310, SCIE 2220, SCIE 3204, CHE 1510	MATH 3310
CHE 3106	BASIC PRINCIPLES OF CHEMICAL ENGINEERING II	3	CHE 3100, CHE 3104	
CHE 4110	CHEMICAL ENGINEERING THERMODYNAMICS	3	CHE 3104	
CHE 4111	MOMENTUM TRANSFER OPERATIONS LABORATORY	1	CHE 3116	
CHE 4115	HEAT TRANSFER OPERATIONS LABORATORY	1	CHE 4114	
CHE 5112	CHEMICAL ENGINEERING PROCESS DESIGN	3	CHE 4120, CHE 4128, ENGI 4210, ENGI 3210	CHE 4130
CHE 5114	PROCESS DYNAMICS AND CONTROL	3	CHE 4120, CHE 4128, EE 3800	CHE 4130
CHE 5113	MASS TRANSFER OPERATIONS LABORATORY	1	CHE 4130, CHE 4111, CHE 4115	
CHE 5115	REACTOR DESIGN AND PROCESS CONTROL LABORATORY FOR CHEMICAL ENGINEERING	1	CHE 4130, CHE 4128, CHE 4111, CHE 4115	CHE 5114
CHE 5916	CHEMICAL ENGINEERING CAPSTONE COURSE I	3	CHE 5114	CHE 5112, CHE 5930

POLYTECHNIC UNIVERSITY OF PUERTO RICO
CHEMICAL ENGINEERING DEPARTMENT
CHEMICAL ENGINEERING PROGRAM

PREPARATORY STUDIES COMPONENT
(Maximum of 31 credit-hours)

COURSE	COURSE TITLE	CR	PRE-REQUISITES
MATH 0102	PREPARATORY MATHEMATICS	3	PLACEMENT BY ADMISSION OFFICE
MATH 0106	ELEMENTARY ALGEBRA	3	PLACEMENT BY ADMISSION OFFICE OR MATH 0102
MATH 0110	INTERMEDIATE ALGEBRA	3	PLACEMENT BY ADMISSION OFFICE OR MATH 0106
SCIE 0110	INTRODUCTION TO PHYSICS	3	PLACEMENT BY ADMISSION OFFICE OR MATH 0110
SCIE 1110	GENERAL BIOLOGY	4	TO BE TAKEN BY STUDENTS WHO HAVE NOT TAKEN A BIOLOGY COURSE IN HIGH SCHOOL OR A HIGHER EDUCATION INSTITUTION. CO-REQUISITE: SCIE 1111
SCIE 1111	GENERAL BIOLOGY LABORATORY	0	TO BE TAKEN BY STUDENTS WHO HAVE NOT TAKEN A BIOLOGY COURSE IN HIGH SCHOOL OR A HIGHER EDUCATION INSTITUTION. CO-REQUISITE: SCIE 1110
ATUL 0100	ADJUSTMENT TO UNIVERSITY LIFE	3	TO BE TAKEN BY FRESHMEN DURING THE FIRST YEAR OF RESIDENCY
ENGL 0100	PREPARATORY ENGLISH	3	PLACEMENT BY ADMISSION OFFICE
ENGL 0110	ENGLISH GRAMMAR	3	PLACEMENT BY ADMISSION OFFICE OR ENGL 0100
SPAN 0100	PREPARATORY SPANISH	3	PLACEMENT BY ADMISSION OFFICE
SPAN 0110	SPANISH GRAMMAR	3	PLACEMENT BY ADMISSION OFFICE OR SPAN 0100

CHEMICAL ENGINEERING CURRICULUM

COURSE	COURSE TITLE	CR	PRE-REQUISITES	CO-REQUISITES
MATH 1330	PRECALCULUS I	3	PLACEMENT BY ADMISSION OFFICE OR MATH 0110	
MATH 1340	PRECALCULUS II	3	PLACEMENT BY ADMISSION OFFICE OR MATH 1330	
MATH 2310	CALCULUS I	3	MATH 1340	
MATH 2320	CALCULUS II	3	MATH 2310	
MATH 2330	CALCULUS III	3	MATH 2320	
MATH 2340	CALCULUS IV	3	MATH 2330	
MATH 3310	DIFFERENTIAL EQUATIONS	3	MATH 2340	
SCIE 1214	GENERAL CHEMISTRY I	4	MATH 1330	SCIE 1215, MATH 1340
SCIE 1215	GENERAL CHEMISTRY I LAB.	0	MATH 1330	SCIE 1215, MATH 1340
SCIE 1220	GENERAL CHEMISTRY II	4	SCIE 1214, SCIE 1215, MATH 1340	SCIE 1221
SCIE 1221	GENERAL CHEMISTRY II LAB.	0	SCIE 1214, SCIE 1215, MATH 1340	SCIE 1221
SCIE 2220	ORGANIC CHEMISTRY I	4	SCIE 1220, SCIE 1221, MATH 1340	SCIE 2221, MATH 2310
SCIE 2221	ORGANIC CHEMISTRY I LAB.	0	SCIE 1220, SCIE 1221, MATH 1340	SCIE 2221, MATH 2310
SCIE 2230	ORGANIC CHEMISTRY II	4	SCIE 2220, SCIE 2221, MATH 2310	SCIE 2231, MATH 2320
SCIE 2231	ORGANIC CHEMISTRY II LAB.	0	SCIE 2220, SCIE 2221, MATH 2310	SCIE 2231, MATH 2320

COURSE	COURSE TITLE	CR	PRE-REQUISITES	CO-REQUISITES
SCIE 3204	ANALYTICAL CHEMISTRY	4	SCIE 1220, SCIE 1221, MATH 2320	SCIE 3205, MATH 2330, ENGI 2210
SCIE 3205	ANALYTICAL CHEMISTRY LAB.	0	SCIE 1220, SCIE 1221, MATH 2320	SCIE 3205, MATH 2330, ENGI 2210
SCIE 2430	PHYSICS I, MECHANICS	3	MATH 2310	SCIE 2431
SCIE 2431	PHYSICS I, LABORATORY	1	MATH 2310	SCIE 2430
SCIE 2440	PHYSICS II, HEAT, LIGHT & SOUND	3	MATH 2320, SCIE 2430, SCIE 2431	SCIE 2441
SCIE 2441	PHYSICS II, LABORATORY	1	MATH 2320, SCIE 2430, SCIE 2431	SCIE 2440
SCIE 2450	PHYSICS III, ELECTRICITY & MAGNETISM	3	MATH 2330, SCIE 2440, SCIE 2441	SCIE 2451
SCIE 2451	PHYSICS III, LABORATORY	1	MATH 2330, SCIE 2440, SCIE 2441	SCIE 2450
SCIE 3210	PHYSICAL CHEMISTRY I	4	SCIE 3204, SCIE 3205, MATH 2340, SCIE 2440, SCIE 2441	SCIE 3211, MATH 3310
SCIE 3211	PHYSICAL CHEMISTRY I LAB.	0	SCIE 3204, SCIE 3205, MATH 2340, SCIE 2440, SCIE 2441	SCIE 3211, MATH 3310
SPAN 1010	LINGUISTIC ANALYSIS OF LITERARY GENRES	3	SPAN 0110	
SPAN 2010	HISPANIC LITERATURE	3	SPAN 1010	
ENGL 1010	THE STUDY OF THE ESSAY AS A LITERARY GENRE	3	ENGL 0110	
ENGL 2010	LITERARY ANALYSIS OF FICTION, POETRY, AND DRAMA	3	ENGL 1010	
SOHU 2010	SOCIO-HUMANISTIC STUDIES I	3		
SOHU 2020	SOCIO-HUMANISTIC STUDIES II	3	SOHU 2010	
*****	SOCIO-HUMANISTIC OR LANGUAGES ELECTIVE	3	ACCORDING TO SELECTED COURSE	
PHIL 3040	ETHICS IN ENGINEERING	3	SOHU 2020	
ENGI 1110	ENGINEERING GRAPHICS	3		
ENGI 1130	FRESHMAN ENGINEERING DESIGN	3	ENGI 1110	
ENGI 2110	ENGINEERING MECHANICS, STATICS	3	MATH 2330, SCIE 2430	
ENGI 2210	ENGINEERING PROBABILITY AND STATISTICS	3	MATH 2320	
ENGI 2310	COMPUTER PROGRAMMING AND ALGORITHMS	3	MATH 2310	
ENGI 3210	ENGINEERING MATERIALS	3	SCIE 1220, MATH 2330	
ENGI 4210	ENGINEERING ECONOMICS	3	MATH 2320	
EE 3800	PRINCIPLES OF ELECTRICAL ENGINEERING	3	SCIE 2450, MATH 2340	
CHE 1510	INTRODUCTION TO CHEMICAL ENGINEERING	3	ENGI 1130	SCIE 1214
CHE 3100	BASIC PRINCIPLES OF CHEMICAL ENGINEERING I	3	MATH 2340, ENGI 2310, SCIE 2220, SCIE 3204, CHE 1510	MATH 3310
CHE 3104	THERMODYNAMICS	3	MATH 3310, SCIE 3210	
CHE 3106	BASIC PRINCIPLES OF CHEMICAL ENGINEERING II	3	CHE 3100, CHE 3104	
CHE 3116	FLUID MECHANICS FOR CHEMICAL ENGINEERS	3	CHE 3106, ENGI 2110	
CHE 3118	APPLIED MATHEMATICS IN CHEMICAL ENGINEERING	3	CHE 3100	CHE 3106

COURSE	COURSE TITLE	CR	PRE-REQUISITES	CO-REQUISITES
CHE 4110	CHEMICAL ENGINEERING THERMODYNAMICS	3	CHE 3104	
CHE 4114	HEAT TRANSFER	3	CHE 3116, CHE 3104	
CHE 4111	MOMENTUM TRANSFER OPERATIONS LABORATORY	1	CHE 3116	
CHE 4115	HEAT TRANSFER OPERATIONS LABORATORY	1	CHE 4114	
CHE 4120	MASS TRANSFER OPERATIONS I	3	CHE 4110, CHE 4114	CHE 4128
CHE 4128	CHEMICAL REACTION ENGINEERING	3	CHE 4110, CHE 4114, SCIE 2230	CHE 4120
CHE 4130	MASS TRANSFER OPERATIONS II	3	CHE 4120	
CHE 5112	CHEMICAL ENGINEERING PROCESS DESIGN	3	CHE 4120, CHE 4128, ENGI 4210, ENGI 3210	CHE 4130
CHE 5114	PROCESS DYNAMICS AND CONTROL	3	CHE 4120, CHE 4128, EE 3800	CHE 4130
CHE 5113	MASS TRANSFER OPERATIONS LABORATORY	1	CHE 4130, CHE 4111, CHE 4115	
CHE 5115	REACTOR DESIGN AND PROCESS CONTROL LABORATORY FOR CHEMICAL ENGINEERING	1	CHE 4130, CHE 4128, CHE 4111, CHE 4115	CHE 5114
*****	FREE ELECTIVE	3	ACCORDING TO SELECTED COURSE	
CHE ****	CHEMICAL ENGINEERING DESIGN ELECTIVE	3	ACCORDING TO SELECTED COURSE	
CHE ****	CHEMICAL ENGINEERING ELECTIVE	3	ACCORDING TO SELECTED COURSE	
CHE 5916	CHEMICAL ENGINEERING CAPSTONE COURSE I	3	CHE 5114	CHE 5112, CHE 5930
CHE 5920	CHEMICAL ENGINEERING CAPSTONE COURSE II	3	CHE 5916	
CHE 5930	CHEMICAL ENGINEERING SEMINAR	1		CHE 5916

CHEMICAL ENGINEERING ELECTIVES

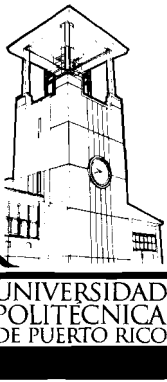
COURSE	COURSE TITLE	CR	PRE-REQUISITES	CO-REQUISITES
CHE 5120	CHEMICAL ENGINEERING PRACTICE	3	CHE 4120	
CHE 5212	AIR POLLUTION CONTROL	3	CHE 4120, CHE 4128	
CHE 5214	WATER POLLUTION CONTROL	3	CHE 4120, CHE 4128	
CHE 5216	SOLID WASTE MANAGEMENT	3	CHE 4120, CHE 4128	
CHE 5218	ENVIRONMENTAL LAWS AND REGULATIONS	3	CHE 5916	
CHE 5210	PRINCIPLES OF ENVIRONMENTAL ENGINEERING	3	CHE 4120, CHE 4128, CHE 2230	
CHE 5220	NANO-STRUCTURES IN CHEMICAL PROCESS	3	CHE 3106, ENGI 3210	
CHE 5310	PRINCIPLES OF PHARMACEUTICAL OPERATIONS	3	CHE 4130	
CHE 5312	BIOCHEMISTRY APPLIED TO CHEMICAL ENGINEERING	3	SCIE 1110, SCIE 2230, CHE 3106	
CHE 5314	INTRODUCTION TO POLYMERS	3	SCIE 2230	CHE 4114
CHE 5320	FUNDAMENTALS OF INDUSTRIAL HYGIENE	3	SCIE 1210 or SCIE 1214	CAPSTONE COURSE
CHE 5316	TRANSPORT PHENOMENA	3	CHE 4130	

TOTAL

164 CREDITS

Rev. 07/2006
Curriculum for FALL 2006

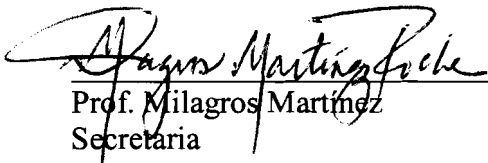
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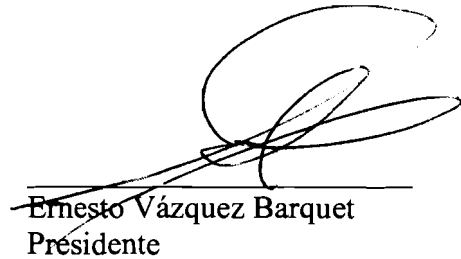
CERTIFICACIÓN
CA #01-06

Yo, Milagros Martínez, Secretaria del Consejo Académico de la Universidad Politécnica de Puerto Rico, certifico que en la reunión celebrada el lunes, 7 de agosto de 2006, debidamente convocada y con el quórum correspondiente, se aprobó el cambio de código del Curso SSPL 2312 Topographic Surveying. El nuevo código será **SSPL 3316**.

Dicho cambio es efectivo en el trimestre 06/FA.


Prof. Milagros Martínez
Secretaria

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Ernesto Vázquez Barquet
Presidente

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