

12-8-1977

## Curricular Report No. 1977-78-4 from the Graduate Council to the Faculty Senate

University of Rhode Island Faculty Senate

Follow this and additional works at: [https://digitalcommons.uri.edu/facsen\\_bills](https://digitalcommons.uri.edu/facsen_bills)

---

### Recommended Citation

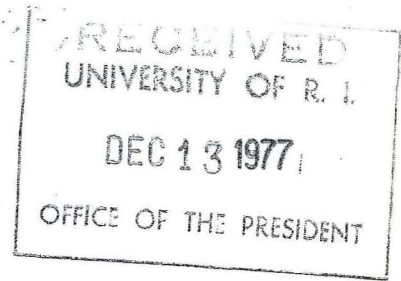
University of Rhode Island Faculty Senate, "Curricular Report No. 1977-78-4 from the Graduate Council to the Faculty Senate" (1977). *Faculty Senate Bills*. Paper 559.  
[https://digitalcommons.uri.edu/facsen\\_bills/559](https://digitalcommons.uri.edu/facsen_bills/559)

This Legislation is brought to you by the University of Rhode Island. It has been accepted for inclusion in Faculty Senate Bills by an authorized administrator of DigitalCommons@URI. For more information, please contact [digitalcommons-group@uri.edu](mailto:digitalcommons-group@uri.edu). For permission to reuse copyrighted content, contact the author directly.

UNIVERSITY OF RHODE ISLAND  
Kingston, Rhode Island

FACULTY SENATE  
BILL

Adopted by the Faculty Senate



TO: President Frank Newman

FROM: Chairman of the Faculty Senate

1. The attached BILL, titled Curricular Report No. 1977-78-4 from the Graduate Council to the Faculty Senate

is forwarded for your consideration.

2. The original and two copies for your use are included.
3. This BILL was adopted by vote of the Faculty Senate on December 8, 1977 (date)
4. After considering this bill, will you please indicate your approval or disapproval. Return the original or forward it to the Board of Regents, completing the appropriate endorsement below.
5. In accordance with Section 8, paragraph 2 of the Senate's By-Laws, this bill will become effective on December 29, 1977 (date), three weeks after Senate approval, unless: (1) specific dates for implementation are written into the bill; (2) you return it disapproved; (3) you forward it to the Board of Regents for their approval; or (4) the University Faculty petitions for a referendum. If the bill is forwarded to the Board of Regents, it will not become effective until approved by the Board.

December 9, 1977

(date)

Robert M. Gutchen  
Chairman of the Faculty Senate

ENDORSEMENT 1.

TO: Chairman of the Faculty Senate

FROM: President of the University

1. Returned.
2. Approved 12/20/77 Disapproved \_\_\_\_\_
3. (If approved) In my opinion, transmittal to the Board of Regents is not necessary.

12/20/77  
(date)

President

ALTERNATE ENDORSEMENT 1.

TO: Chairman of the Board of Regents

FROM: The University President

- 1. Forwarded.
- 2. Approved.

\_\_\_\_\_  
(date)

\_\_\_\_\_  
President

ENDORSEMENT 2.

TO: Chairman of the Faculty Senate

FROM: Chairman of the Board of Regents, via the University President.

- 1. Forwarded.

\_\_\_\_\_  
(date)

\_\_\_\_\_  
(Office)

ENDORSEMENT 3.

TO: Chairman of the Faculty Senate

FROM: The University President

- 1. Forwarded from the Chairman of the Board of Regents.

\_\_\_\_\_  
(date)

\_\_\_\_\_  
President

Original received and forwarded to the Secretary of the Senate and Registrar for filing in the Archives of the University.

\_\_\_\_\_  
(date)

\_\_\_\_\_  
Chairman of the Faculty Senate

UNIVERSITY OF RHODE ISLAND  
The Graduate School

CURRICULAR REPORT FROM THE GRADUATE COUNCIL TO THE FACULTY SENATE - Report No. 1977-78-3

At its Meeting No. 167 held November 4, 1977 the Graduate Council considered and approved the following curricular matter which is now submitted to the Faculty Senate for information.

I. Matters of Information.  
A. Library (Special Collections)  
1. Temporary Course

LIB 505X Fine Letterpress Printing I,II,3  
History, theory and practice of fine printing by letterpress, with emphasis on the work of the great private presses. (Lec and Lab) Pre: Graduate standing or permission of instructors. Maslyn and Gutchen

RECEIVED

NOV 10 1977

UNIVERSITY OF RHODE ISLAND  
FACULTY SENATE

UNIVERSITY OF RHODE ISLAND  
The Graduate School

CURRICULAR REPORT FROM THE GRADUATE COUNCIL TO THE FACULTY SENATE - Report No. 1977-78 -

At its Meeting No. 168 held November 18, 1977 the Graduate Council considered and approved the following curricular matters which are now submitted to the Faculty Senate for information or confirmation as indicated.

I. Matters of Information.  
A. College of Engineering  
1. Department of Electrical Engineering  
a. Temporary Courses (to be superseded by permanent courses below)

ELE 513X Solar to Electric Energy Conversion II,3  
Review of the theory of thermal radiation. Collection of radiant energy as heat and direct conversion to electricity. Concentration on photovoltaic solar cells. (Lec 3) Pre: ELE 331 or equivalent. Mardix

ELE 510X Communication Theory II,3  
Communication theory for discrete and continuous channels. Optimum receiver principles and signal design. Calculation of channel capacity and reliability functions, coded systems, channel models, modulation techniques and performance. (Lec 3) Pre: ELE 509. Staff

II. Matters Requiring Confirmation by the Faculty Senate.  
A. College of Engineering  
1. Department of Electrical Engineering  
a. Add (New)

ELE 513 Solar to Electric Energy Conversion II,3  
Review of the theory of thermal radiation. Collection of radiant energy as heat and direct conversion to electricity. Concentration on photovoltaic solar cells. (Lec 3) Pre: ELE 331 or equivalent. Permission of instructor. Mardix

ELE 508 Computer Architecture I and II,3  
Hardware architecture of modern minicomputers and microcomputers. Instruction sets, memory organization, peripheral interfacing and control, bus structures, microprogramming, microcomputer systems, techniques for real-time operation, software aids and requirements. (Lec 3) Pre: ELE 405 or CSC 311 or equivalent. Staff

ELE 542 Analog Filter Design I or II,3  
Introduction to passive network synthesis. Analysis and design of active circuits and filters with operational amplifiers; generalized impedance converters; gyrators. Introduction to the design of thick-film hybrid microcircuits. (Lec 3) Pre: ELE 444 or equivalent. Krikorian

ELE 661 Estimation Theory I or II,3  
Extraction of information from discrete and continuous data, best linear estimation, recursive estimation, optimal linear filtering, smoothing and prediction, nonlinear state and parameter estimation, design and evaluation of practical estimators. (Lec 3) Pre: ELE 503 and 509. Lindgren and Tufts



b. Changes

ELE 501 Linear Systems Theory (title and description changed to read-)

ELE 501 Linear Transform Analysis I,3  
 Fourier and Laplace transform analysis of continuous-time systems, causality and spectral factorization, evaluation of inverse transforms, z-transform analysis of discrete-time systems, Hilbert transforms, discrete Fourier transforms, generalized transforms. (Lec 3) Staff

ELE 605 Nonlinear System Analysis - renumbered to ELE 502

ELE(MCE)503: Linear Control System (description changed to read-)

ELE(MCE)503 Linear Control Systems I or II,3  
 State variable description of continuous and discrete-time systems, matrices and linear spaces, controllability and observability, pole placement methods, observer theory and state reconstruction, modern control systems design. (Lec 3) Pre: ELE 313 or MCE 366 or equivalent. Lindgren and Palm

ELE 651 Feedback Control Systems I (number, title, and description changed to-)

ELE 504 Optimal Control Theory II,3  
 Quadratic performance indices and optimal linear control, frequency response properties of optimal feedback regulators, state estimation, separation theorem, optimal control of nonlinear systems, Pontryagin's minimum principle. (Lec 3)  
 Pre: ELE 503. Lindgren and Krikorian

ELE 505 Design of Digital Circuits (description changed to read-)

ELE 505 Design of Digital Circuits I,3  
 Design techniques for digital computers and controllers. Combinatorial and sequential circuits, minimization techniques, fast arithmetic circuits, memory and control circuits, floating-point hardware, Turing machines, coders and decoders, microprogramming, sequence generators. (Lec 3) Pre: ELE 405 or equivalent. Staff

ELE 561 Information Transmission (number, title and description changed to-)

ELE 510 Communication Theory II,3  
 Communication theory for discrete and continuous channels. Optimum receiver principles and signal design. Calculation of channel capacity and reliability functions, coded systems, channel models, modulation techniques and performance. (Lec 3)  
 Pre: ELE 509. Staff

ELE 581 Intelligence in Man and Machine- title changed to-

ELE 581 Artificial Intelligence

ELE 665 Detection, Estimation and Modulation Theory (title and description to re

ELE 665 Modulation and Detection I or II,3  
 Advanced treatment of modulation and detection theory. Minimum mean-square error, maximum likelihood, and maximum posterior probability estimators. Applications to communication systems and to radar and sonar systems. (Lec 3) Pre: ELE 510. Tufts.

B. College of Pharmacy

I. Department of Pharmacognosy  
 a. Add (New)

PCG 597,598 Special Problems I and II, 1-3 each  
 Special graduate student project assignments in the study of natural drug research under the supervision of faculty. Credits not to exceed total of six. Pre: Permission of department. For graduate students only. Staff