

TO: President Robert Aebersold
FROM: President of the University Senate

1. The attached motion of the University Senate, dealing with Curriculum is presented to you for your consideration. Two additional copies are included for your use.
2. This motion was adopted by the University Senate on 7 March 2005
3. After considering this motion, please indicate your action on this form, and return it together with the original copy to the President of the University Senate.
4. Under the By-Laws of the University Senate, Section 3.8, the following schedule of action is to be observed.
 - a) By March 10, Senate action reported to the President of University.
(Date)
(Within five school days of the session in which they are adopted).
 - b) By March 20, President of the University to return the motion to the President of the Senate. (Within 10 school days of its receipt).
03-10-05 [Signature] for President Aebersold
(Date) President, University Senate

ENDORSEMENT:

TO: President of the University Senate

FROM: President Robert Aebersold

1. Motion Approved ✓
 2. Motion Disapproved _____
(Explanatory statement must be appended)
 3. Action "is deferred" _____
 4. Resolution Noted _____
 5. Other _____
- 3/24/05 _____
Date President

Curriculum Committee (Chair, C. Pudlinski)

Revisions, Additions, Deletions, Clarifications of pre-requisites, Changing titles,
Programmatic changes as recommended by the Curriculum Committee March report at

www.ccsu.edu/curriculum/senate_reports/04_05/mar.html.

(Wolff/Dowty) – approved unanimously

Academic Freedom resolution (Lisi /Terezakis/ Austad/ White(CCSU-AAUP))

As attached:

(Best / Terezakis) – approved unanimously

MARCH 2005 SENATE REPORT

This report will be taken up by the Faculty Senate at its March 7, 2005 meeting.

(Unless otherwise noted, course additions/changes/deletions take effect in Intersession/Spring 2006; program changes/additions may take effect as early as Fall 2005; *specific revisions to existing programs and courses are noted in italics.*)

1b. Manufacturing & Construction Management

Program Revision: CM 515 Construction Law

Add special condition: This is a link course with CM 415.

4. Mathematical Sciences:

4a. Program revision: Major in Mathematics, M.S. (for certified elementary teachers):

Delete Plan B capstone option.

4b. Program revision: Major in Mathematics, M.S. (for certified secondary teachers):

Delete Plan B capstone option.

5. Physics and Earth Sciences:

5a-c. Program revision: Interdisciplinary Major - Sciences with Specialization in Biology or Earth Sciences, B.S. (Acceptable for certification in elementary education):[20050104132522](#)

d) **Specialization in Biology or Earth Sciences** (Acceptable major for certification programs in elementary education) 39-42 credits. Core: 24-32 credits. Required: Physics (6-8 credits), PHYS 111/113 or 121/122 or 125/126; Chemistry (6-8 credits), CHEM 102, 111 or CHEM 121/122; Biology (6-8 credits), BIO 111, 211, 132 or 121/122; Earth Science (6-8 credits), *ESCI 111, or ESCI 121 and 123, or ESCI 129, or ESCI 178.*

Specialization—A minimum of 18 credits in a specialization including 6-8 credits in the core for the specialization:

Biology (changed in December 2004)

Earth Science—Requires ESCI 121, ESCI 123, ESCI 129, and ESCI 178. ESCI Electives (choose a minimum of 6 credits as needed to reach 39) ESCI 122, ESCI 179, ESCI 430, other electives as approved by advisor.

(This replaces items in Specialization (d) on p. 57.)

5b: Program revision: For certification in elementary or middle level education, Complementary Subject Matter Area in Earth Sciences:[20050103151219](#)

18/19 credits, as follows: ESCI 121, 123, 129, 178 as core courses. A minimum of 6 credits from the following electives: ESCI 122 or 179 or 222 or 278 or 424. Other electives as approved by advisor. Please consult with the School of Education and Professional Studies concerning additional requirements for dual subject programs and interdisciplinary majors.

7. Reading:

7a. Course revision: :RDG 585 Reading in Content Area

Change prerequisites: RDG 501 or 502 or 503 or 504; and admission to M.S. or 6th year program.

7b.:course revision: :RDG 586 Literacy Instruction for Diverse Populations I:

Change prerequisites: Admission to M.S. or 6th year program.

7c.:course revision: :RDG 589 Creative Language Arts:

Change prerequisites: RDG 501 or 502 or 503 or 504; and admission to M.S. or 6th year program.

7d.:course revision: :RDG 590 Current Trends in Developmental Reading K-12:

Change prerequisites: Admission to M.S. or 6th year program.

Change course number to: RDG 501.

7e.:course revision: :RDG 591 Developmental Reading in Primary Grades:

Change prerequisites: Admission to M.S. or 6th year program.

Change course number to: RDG 502.

7f.:course revision: :RDG 592 Middle School Level Literacy Development:

Change prerequisites: Admission to M.S. or 6th year program.

Change course number to: RDG 503.

7g.:course revision: :RDG 667 Multicultural Literature in the Classroom:

Change prerequisites: RDG 588 and Admission to 6th year or Ed. D. program.

7h.:course revision: :RDG 675 Reading and Writing as Integrated Process:

Change prerequisites: RDG 589 and Admission to 6th year or Ed. D. program.

7i. Course revision of RDG 593 Developmental reading in Secondary Schools

Change course number to: RDG 504.

8. Vocational Technology Education

8a: Course revision: VTE 113 Introduction to Teaching in the Connecticut Technical School System:

Change total credits from: 3 to: 4.

(Effective Spring 2005.)

8b: Course revision: VTE 116 Teaching in the Connecticut Technical School System:

Change total credits from: 3 to: 2.

(Effective Summer 2005.)

9. Manufacturing & Construction Management:

9a. Course revision: :CM 135 Construction Quantity Take-Off

Change title, as noted above.

9b. course revision: :EMEC 303 Electro-Mechanical Converters

Change prerequisites: TE 213 or CET 223 or PHYS 122.

9c: course revision: :EMEC 313 Electrical Power Systems

Delete prerequisites.

9d: course revision: :EMEC 323 Mechatronics

Add prerequisites: TE 213 or CET 223 or PHYS 122.

9e: course revision: :EMEC 333 Data Acquisition & Control

Change prerequisites: TE 213 or CET 223 or PHYS 122.

Correct typo in description (from "examinatin" to "examination")

9f: course revision: :IT 410 Industrial Safety

Change number to: IT 310

Delete [G] credit.

9g: course revision: :IT 360 Production Systems

Change title, as noted above.

Change description to: An introduction to the design, planning, management and control of production systems. Topics include: capacity planning, material management, plant layout, scheduling and production information systems.

9h: course deletion: :IT 390 Auditing Quality Systems Standards

9i: course revision: :IT 414 Accident Investigation & Loss Control

Change title, as noted above.

Change description to: Loss control philosophy, techniques *and accident investigation strategies*. Background information and specific techniques required to develop and implement an effective company-wide and on-site loss control program, personnel responsibilities and total safety program.

9j: course revision: :IT 432 Worker/Supervisor Relations

Delete prerequisites.

9k: course revision: :IT 456 HAZWHOPPER & Hazardous Material Management

Change title, as noted above.

9l: course addition: :IT 511 Safety Training Methods

Discuss instructional methods for safety professionals. Covers company needs analysis, training content development, basic facilitation and instructional strategies to increase employee safety awareness. On demand. 3 credits.

9m: course revision: :IT 412 Principles of Occupational Safety

Change course number to: IT 512.

Change cycling to: On Demand.

9n: course addition: :IT 565 Logistics: Traffic & Transportation

Practical techniques for improving the traffic and transportation performance of a company and its supply chain. Topics include: transportation modes, transportation documentation and pricing, inbound/outbound freight control, international transportation, e-logistics and 3rd Party Logistics providers. On demand. 3 credits.

9o: course addition: :IT 566 Distribution & Warehouse Management

Methodologies for planning, managing and controlling warehouse/distribution operations in the supply chain. Topics include: equipment selection, warehouse layouts, inventory control and work methods. Topics are linked to measuring productivity and performance of warehouse operations. On demand. 3 credits.

9p: course addition: :IT 572 Innovative Leadership

Prerequisite: IT 502. Utilizes innovative concepts and methods derived from scientific and industrial management. Topics include: Lean management systems, results- and processes-focused leadership behavioral routines, decision-making flaws, value stream maps and leadership credibility and organizational capability building. On demand. 3 credits.

9q: course addition: :IT 590 Decision Failure Analysis in Technology Management

Prerequisites: AC 510 and IT 502 and IT 510. Examines contemporary decisions made by technology managers that result in outcomes unfavorable to the company and its key stakeholders. Topics include: formal root cause analysis, identification of practical countermeasures, predicting future failures, and lessons learned. On demand. [c] 3 credits.

9r: course revision: :IT 594 Research Methods in Technology

Change title, as noted above.

9s: course deletion: :IT 664 Quality Data Collection and Analysis

9t: course deletion: :IT 690 Quality Auditing

9u: course revision: :MFG 118 Introduction to Materials

Change title, as noted above.

Change description to: Technical principles and concepts of material structure, properties, and testing methods for the major material families (metals, polymers, ceramics and composites) as it relates to material selection and processing decisions.

9v: course revision: :MFG 496 Lean Manufacturing

Delete prerequisites.

Change description: Principles of lean manufacturing methodologies. Topics include production flow analysis, value stream mapping, pull systems, cellular manufacturing waste elimination, visual factory, error proofing, quick changeover, and change management.

Change cycling to: Fall.

9w. Program deletion: Quality Management specialization

9x: Program revision: Environmental and Occupational Safety specialization

Specialization requirements **Credits**

CET 113 Intro. to Information Processing 3

EMEC 114 Intro. to Energy Processing 3

MFG 118 Intro. to Materials	3
MFG 121 Technical Drafting and CAD	3
CM 335 Construction Safety	3
IT 411 Industrial Hygiene	3
IT 414 Industrial Loss Control Management	3
IT 415 Fire Protection & Prevention	3
IT 456 HAZWHOPPER & Hazardous Material Mgt.	3
Total	27
Technical & Management Electives	12
Total Credits	39

9y. Program revision: B.S. INDUSTRIAL TECHNOLOGY- Manufacturing Specialization

Manufacturing Advisors: David Stec (832-1691); Bob Emiliani (832-3229). This specialization is designed to prepare students primarily for middle management and supervisory positions that are production oriented. Areas of study include production control, computer-based manufacturing technology, lean manufacturing, supply chain strategy, cost estimating, production supervision, and quality control. (Related job titles include industrial engineer, production supervisor, and quality control supervisor.)

Specialization Requirements	Credits
MFG 118 Introduction to Materials	3
MFG 121 Technical Drafting & CAD	3
MFG 216 Manufacturing Processes	3
MFG 226 Principles of CNC	3
MFG 236 Tool Design	3
MFG 496 Lean Manufacturing	3
CET 113 Intro. to Information Processing	3
EMEC 114 Intro to Energy Processing	3
ETM 340 Geometric Dimensioning & Tolerancing	3

IT 360 Production Systems 3

IT 464 Intro to Six Sigma Quality 3

TOTAL: 33

Technical & Mgmt. Electives: 6

TOTAL: 39

9z: Program revision: M.S. in TECHNOLOGY MANAGEMENT

The Master of Science in Technology Management consists of three different plans. A is 33 credits with a thesis, B is 33 credits with comprehensive exams and C is 33 credits with a research project.

a. All three plans have a core curriculum (18 credits) as follows: IT 500 Industrial Applications of Computers IT 502 Human Relations and Behavior in Complex Organizations IT 510 Industrial Planning and Control IT 551 Project Management IT 598 Research in Technology AC 510 Accounting and Control

b. Directed electives. Plans A and C require 12 credits. Plan B requires 15 credits. These are courses in technology at the 400- and 500-level as approved by a faculty advisor. This allows the student flexibility to develop a specialization.

Strands Some examples could include, but are not limited to: - Construction Management, - Computer Applications, - Environmental and Occupational Safety, - Manufacturing Operations, - Quality Management, - Supply Chain & Logistics, and - Robotics and Automation.

c. All three plans have capstone course requirements of 0-3 credits. Plan A: IT 599 Thesis Plan B: Comprehensive exam Plan C: IT 595 Applied Research Topic in Technology

Note: No more than nine credits at the 400 level, as approved by the graduate advisor, may be counted toward the graduate planned program of study.

(This changes total credits for degree from: 30-36 to: 33.)

9aa: Program addition: Supply Chain & Logistics Official Certificate Program 509

Program Requirements: Participants must successfully complete the following (4) courses: IT 562 - Supply Chain Issues IT 563 - Logistics Issues IT 565 - Logistics: Traffic and Transportation IT 566 - Distribution & Warehouse Management.

Up to 12 credits can be counted towards the M.S. in Technology Management.

10. Geography:

10a. course addition: :GEOG 130 Introduction to Geographic Information Science

Introduction to basic concepts within the fields of cartography, geodesy, spatial statistics, remote

sensing, and geographic information systems. Study Area II. [c] 3 credits.

10b: course revision: :GEOG 378 Geographic Information Systems

Change title, as noted above.

Change prerequisites: GEOG 130 or GEOG 256 or GEOG 276, or permission of instructor.

Change description: Introduction to raster and vector geographic information systems, with a focus on application areas in natural resource management, urban and regional planning, and business.

Change credits from 2 to 3.

10c: course deletion: :GEOG 379 GIS Laboratory

10d: course addition: :GEOG 466 Remote Sensing

Prerequisites: GEOG 266 or GEOG 378. Computer analysis and interpretation of satellite remote sensing data for inventorying, mapping, and monitoring earth's resources. Spring (o). [c] 3 credits.

10e: course addition: :GEOG 470 Geography of Health and Disease

Prerequisites: GEOG 220 or permission of instructor. Investigation of health-related topics using geographical frameworks and methodological techniques. Themes include disease distribution, health care access, and HIV/AIDS in a global context. Spring (o). 3 credits.

10f: course addition: :GEOG 479 Geographic Information Systems Applications

Prerequisite: GEOG 378. Advanced study of applications in geographic information systems. Applications will vary but will include urban/regional planning, natural resources management, and public safety. May be taken twice for credit under different content. Spring (e). [c] 3 credits.

10g: course addition: :GEOG 578 Internet GIS and Mapping

Prerequisites: Planned program of study in M.S. Geography or permission of instructor. Principles and practices of interactive mapping and GIS data distribution across the World Wide Web. Fall (o). [c] 3 credits.

10h-i: Program revision: :Major in Geography, B.A. or B.S.

39 credits in Geography, as follows:

Environmental: GEOG 110, 130; Nine credits from GEOG 270, 272, 275, 374; Nine credits (three at the 300 or 400 level) from GEOG 256, 266, 276, 378, 466, 476, 478, 479; Twelve credits from GEOG 430, 433, 445, 472 and 473; Three credits of Geography electives.

Geographic Information Science: GEOG (110 or 120), 130, 378, 430; Six credits from GEOG 256, 266, 276; Nine credits from GEOG 442, 466, 476, 478, 479, ETC 458; Twelve credits of Geography electives of which at least six must be at the 300 or 400 level.

Tourism: GEOG 110, 120, 130, 430; Fifteen credits from GEOG 290, 291, 450, 451, 453, 454, 455; Three credits from GEOG 330, 434, 435, 436, 437, 446, 448, 452, 459; Three credits from GEOG 270, 272, 275, 374, 472, 473; Three credits of Geography electives; Three credits of THS electives.

General/Regional: GEOG (110 or 120), 130; Fifteen credits of Geography electives (at least nine at the 400-level); Three credits from GEOG 270, 272, 275, 374, 433, 472, 473; Three credits from GEOG 220, 223, 244, 290, 291, 451, 453, 454, 455, 470; Three credits from GEOG 241, 439, 440, 441, 445, 450, 483; Three credits from GEOG 256, 266, 276, 378, 442; Six credits from GEOG 330, 434, 435, 436, 437, 446, 448, 452, 459. All elementary education students selecting this program will take GEOG 414 as one of their 3-credit electives in Geography.

10j: Program revision: Major in Geography with a Specialization in Planning, B.A.

39 credits as follows: GEOG 110, 130, 241, 244, 420, 439, and 441; Twelve credits from GEOG 433, 440, 445, 450, 473 or 483; Six credits of Geography electives. STAT 104 or 215 (Skill Area 2) is also required.

10k: Catalog deletion: Geography Course Groups.

10l: Program addition: Minor in Geographic Information Sciences

18 credits: GEOG 130, GEOG 378, and twelve credit hours (at least six at the 300 or 400 level) from GEOG 256, 266, 276, 466, 476, 478, 479, ETC 458. If a Geography major, 3 additional credits of electives required. Geography majors in the Geographic Information Sciences track may not choose this minor.

11. History:

11a: course revision: :HIST 121 World Civilization I

Remove special condition: No credit for students who have received credit for HIST 142.

11b: course revision: :HIST 122 World Civilization II

Remove special condition: No credit for students who have received credit for HIST 143.

11c: course revision: :HIST 142 Western Civilization I

Remove special condition: No credit for students who have received credit for HIST 121.

11d: course revision: :HIST 143 Western Civilization II

Remove special condition: No credit for students who have received credit for HIST 122.

12. Physical Education & Health Studies:

12a: course revision: :PE 215 Physiological Aspects of the Human Performance of the Aging

Add prerequisite: PE 214.

12b: course revision: PE 337 Group Process in Health Education

Change prerequisites: PE 210 or permission of instructor.

12c: course revision: PE 374 Methods of Teaching Fitness

Change title, as noted.

12g: course revision: PE 422 Motor Learning

Change prerequisites: Admission to the Professional Program in Teacher Education or acceptance to M.S. Physical Education.

12h: course revision: REC 233 Water Safety Instructor's Course

Change prerequisites: Swim the following strokes 25 yards each: Front crawl, breaststroke, elementary breaststroke, sidestroke, (and butterfly 15 yards); tread water for 1 minute.

END OF SENATE REPORT