

MEMORANDUM

TO: School of Technology Curriculum Committee

FROM: Julie Chadd, CTE Program Coordinator

DATE: March 27, 2008

SUBJECT: Proposal to Modify Technology Education Curriculum

The Career and Technical Education program is requesting that the School of Technology Curriculum Committee consider making the attached changes to the Technology Education emphasis area's required courses and electives.

Adding the four additional required core courses will better prepare the students for the Content Area Exam required for state teacher certification. Currently, many of the technology education students are struggling with this exam due to the fact that they have not been exposed to some of the areas tested.

These changes will also provide the students with a more well-rounded education and help prepare them to teach the courses that are prominent in the technology education field. The additional courses will aide the program in meeting the ITEA-CTTE standards required for NCATE approval.

The additional required core courses were included in the current list of approved electives for technology education concentrations. They have been removed from the electives. Moving them to the required list of courses insures that students are taking courses that will meet their needs as secondary teachers.

The Drafting & Design Concentration has been removed and the courses listed in that concentration have been moved to the other concentration areas since many high schools include the course topics in the other concentration areas.

Thank you for your consideration.

Cc: Mahyar Izadi
Deborah Woodley

Required Core Courses - Total: 14-17 hours

- INT 1012 - Technical Drawing. Credits: 2
- INT 1263 - Materials Technology. Credits: 3
- (and INT 4002 or INT 2064)
- INT 1363 - Graphic Communication Technologies. Credits: 3
- INT 1413 - Technological Systems. Credits: 3
- INT 2064 - Manufacturing Processes. Credits: 3
- (or INT 1263 and INT 4002)
- INT 2324 - Electronic Control Systems. Credits: 3
- INT 4002 - Materials Testing. Credits: 3
- (and INT 1263 or INT 2064)

Concentrations:

- First Concentration: 9 semester hours
- Second Concentration or electives: 0-14 semester hours

Approved Electives for Technology Education Concentrations:

Automation & Control:

- INT 2523 - Routing and Switching Fundamentals. Credits: 3
- INT 3073 - Programmable Logic Controllers. Credits: 3
- INT 3103 - Robots and Control Systems. Credits: 3
- INT 3153 - Advanced Routing and Switching. Credits: 3
- INT 4183 - Microcomputer Interfacing and Data Acquisition. Credits: 3
- INT 4274 - Automation and Control Systems. Credits: 4
- INT 4833 - Automatic Identification and Data Capture. Credits: 3

Construction:

- INT 2253 - Construction Equipment and Materials. Credits: 3
- INT 3213 - Surveying and Site Planning. Credits: 3
- INT 3223 - Architectural Drafting and Blueprint Reading. Credits: 3
- INT 3603 - Mechanical Systems in Residential and Commercial Buildings. Credits: 3
- INT 4223 - Construction Cost Estimating. Credits: 3
- INT 4243 - Construction Project Management. Credits: 3

Drafting & Design:

- INT 1001 - Introduction to Computer-Aided Design/Drawing (CAD). Credits: 1
- INT 2043 - Computer-Aided Engineering Drawing. Credits: 3
- INT 3063 - 3-D Modeling. Credits: 3
- INT 3223 - Architectural Drafting and Blueprint Reading. Credits: 3

Graphic Communications:

- INT 2123 - Digital Photography and Imaging. Credits: 3
- INT 3343 - Digital Media Technologies. Credits: 3
- INT 4123 - Advanced Digital Capture for WEB and Print Publishing. Credits: 3
- INT 4353 - Print and Digital Media Production. Credits: 3
- INT 4813 - Advanced Digital Media Technologies. Credits: 3
- INT 4863 - Packaging Design, Specialty Inks, and Coatings. Credits: 3
- INT 4953 - Color Management Applications: Print, Textiles, Web, and other Substrates. Credits: 3

Manufacturing:

- INT 3103 - Robots and Control Systems. Credits: 3
- INT 3113 - Manufacturing Machine Processes. Credits: 3
- INT 3143 - Manufacturing Fabrication Processes. Credits: 3
- INT 3203 - Computer Numerical Control Programming. Credits: 3
- INT 4602 - Physical Metallurgy. Credits: 3
- INT 4853 - Polymers and Composites. Credits: 3

Proposed Catalog Copy

Required Core Courses - Total: 24 hours

- INT 1263 - Materials Technology. Credits: 3
- INT 1363 - Graphic Communication Technologies. Credits: 3
- INT 1413 - Technological Systems. Credits: 3
- INT 2324 - Electronic Control Systems. Credits: 3
- INT 3103 - Robot and Control Systems. Credits: 3
- INT 2253 - Construction Equipment and Materials. Credits: 3
- INT 2043 - Computer Aided Engineering Graphics. Credits: 3
- INT 3113 - Manufacturing Machine Processes. Credits: 3

Concentrations:

- First Concentration: 9 semester hours
- Second Concentration or electives: 0-14 semester hours

Approved Electives for Technology Education Concentrations:

Automation & Control:

- INT 2523 - Routing and Switching Fundamentals. Credits: 3
- INT 3073 - Programmable Logic Controllers. Credits: 3
- INT 3153 - Advanced Routing and Switching. Credits: 3
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- INT 4274 - Automation and Control Systems. Credits: 4
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- INT 4953 - Color Management Applications: Print, Textiles, Web, and other Substrates. Credits: 3
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- INT 3143 - Manufacturing Fabrication Processes. Credits: 3
- INT 3203 - Computer Numerical Control Programming. Credits: 3
- INT 4602 - Physical Metallurgy. Credits: 3
- INT 4853 - Polymers and Composites. Credits: 3
- INT 4002 - Materials Testing. Credits: 3

Date approved by department or school: March 25, 2008

Date approved by college curriculum committee: April 23, 2008

Date approved by COTE: