

MEMORANDUM – REVISED

TO: Dr. Ana Borger-Greco
Faculty Senate Chairperson

FROM: Vilas A. Prabhu
Provost and Vice President
for Academic Affairs

DATE: October 23, 2007

SUBJECT: APPROVAL OF FACULTY SENATE CURRICULAR RECOMMENDATIONS

I am writing to inform you of the approvals of the following Faculty Senate Curricular Actions.

Faculty Senate actions at June 26, 2007, meeting:

New Undergraduate Course(s):

GEOG 395 – Advanced Geographic Information Systems

- 4 credits, Pre-requisites: GEOG 295 or ESCI 281, elective course for most geography majors in the applied geography option.
- CIP CODE: 45.0702
- Faculty Load: To be scheduled within existing complement, taught fall semester of odd-numbered years.

Approved, Effective Fall 2007

ITEC 483 – Computer-Aided Manufacturing

- 3 credits, Pre-requisites: ITEC 382 (486), elective for B.S. ITEC Manufacturing, General Industrial Technology, A.T. ITEC Manufacturing, ITEC minor – Manufacturing and possible elective for BSE EDTE program.
- CIP CODE: 48.0599
- Faculty Load: To be scheduled within existing complement

Approved, Effective Fall 2007

Changes in Undergraduate Courses/Curricula:

ITEC 281 – Processing Metallic Materials

Course description, objectives, course content, evaluation and bibliography have been updated.

Approved, Effective Fall 2007

Changes in Undergraduate Courses/Curricula:

ITEC 486 – CNC Machining

- **RENUMBER and Update title to spell out “CNC”: ITEC 382 – Computer Numerical Control (CNC) Machining**
- Course description, objectives, course content, evaluation and bibliography have been updated.

Approved, Effective Winter 2008

ITEC 485 – Advanced Manufacturing Systems

- Course description, objectives, course content, evaluation and bibliography have been updated.

Approved, Effective Fall 2007

Changes in Undergraduate Courses/Curricula:

| B.S. ITEC – Manufacturing Option - Current Curriculum | Proposed Changes | Analysis/Implications |
|--|--|---|
| <u>BS ITEC</u> <u>Major Field Requirements</u> <ul style="list-style-type: none"> • Total hours required is a minimum of 120 credits for graduation • Technology Literacy Core: 9 credits • Management Core: 15 credits • Electives in Management Core: 9 credits | None | |
| Manufacturing option Required courses: <ul style="list-style-type: none"> • ITEC 241 • ITEC 271 • ITEC 281 • ITEC 486 Select two of the following three courses: <ul style="list-style-type: none"> • ITEC 375 • ITEC 376 • ITEC 385 Select two of the following courses: <ul style="list-style-type: none"> • ITEC 325 • ITEC 336 • ITEC 425 • ITEC 448 Select one of the following two courses: <ul style="list-style-type: none"> • ITEC 476 • ITEC 485 | Manufacturing option Required courses: <ul style="list-style-type: none"> • ITEC 241 • ITEC 271 • ITEC 281 • ITEC 382 (486) Select two of the following three courses: <ul style="list-style-type: none"> • ITEC 375 • ITEC 376 • ITEC 483 Select two of the following courses: <ul style="list-style-type: none"> • ITEC 325 • ITEC 336 • ITEC 425 • ITEC 445 • ITEC 448 Select one of the following two courses: <ul style="list-style-type: none"> • ITEC 476 • ITEC 485 | Update ITEC 486 number to 382, delete ITEC 385 and replace with new course ITEC 483. These curriculum updates reflect contemporary changes in technology within the discipline and accreditation standards set forth by the National Association of Industrial Technology. |

Approved, Effective Fall 2007

Changes in Undergraduate Courses/Curricula:

| B.S. ITEC – General Technology Option - Current Curriculum | Proposed Changes | Analysis/Implications |
|--|---|---|
| <p><u>BS ITEC</u> <u>Major Field Requirements</u></p> <ul style="list-style-type: none"> • Total hours required is a minimum of 120 credits for graduation • Technology Literacy Core: 9 credits • Management Core: 15 credits • Electives in Management Core: 9 credits | <p>None</p> | |
| <p>General Technology option Required courses:</p> <ul style="list-style-type: none"> • ITEC 241 • ITEC 251 • ITEC 261 • ITEC 271 • ITEC 281 • ITEC 325 • ITEC * • ITEC * 300 level or above ITEC technical lab course selected in consultation with advisor • ITEC ** One R&D courses is required (ITEC 326, 336, 345, 356, 425, 455, 466, 467, 485, 486, 498) | <p>General Technology option Required courses:</p> <ul style="list-style-type: none"> • ITEC 241 • ITEC 251 • ITEC 261 • ITEC 271 • ITEC 281 • ITEC 325 • ITEC * • ITEC * 300 level or above ITEC technical lab course selected in consultation with advisor (ITEC 382, 483 and 485 may be used here) • ITEC ** One R&D courses is required (ITEC 326, 336, 344, 356, 382, 425, 445, 455, 466, 467, 485, 498) | <p>Add ITEC 382 (486), 483 and 485 to the list of acceptable courses which students may select to fulfill the three technical electives area in the major.</p> <p>These curriculum updates reflect contemporary changes in technology within the discipline and accreditation standards set forth by the National Association of Industrial Technology.</p> |

Approved, Effective Fall 2007

| A.T. ITEC – Manufacturing option - Current Curriculum | Proposed Changes | Analysis/Implications |
|---|--|---|
| <p>Manufacturing option Required Courses:</p> <ul style="list-style-type: none"> • ITEC 241 • ITEC 242 • ITEC 271 • ITEC 281 • ITEC 486 <p>Select two of the following courses:</p> <ul style="list-style-type: none"> • ITEC 200 • ITEC 325 • ITEC 336 • ITEC 375 • ITEC 376 • ITEC 385 • ITEC 425 • ITEC 448 | <p>Manufacturing option Required Courses:</p> <ul style="list-style-type: none"> • ITEC 241 • ITEC 271 • ITEC 281 • ITEC 342 • ITEC 382 (486) <p>Select two of the following courses:</p> <ul style="list-style-type: none"> • ITEC 300 • ITEC 325 • ITEC 336 • ITEC 375 • ITEC 376 • ITEC 425 • ITEC 445 • ITEC 448 • ITEC 483 • ITEC 485 | <p>Revise ITEC 486 number to 382, add ITEC 483, 485 to the electives list.</p> <p>These curriculum revisions bring the ITEC options in line with National Association of Industrial Technology accreditation standards. They also give the students the necessary skills they need to compete for manufacturing positions in modern industry.</p> |

Approved, Effective Fall 2007

Changes in Undergraduate Courses/Curricula:

| A.T. ITEC – Mechanical Option - Current Curriculum | Proposed Changes | Analysis/Implications |
|--|---|--|
| Required Courses: <ul style="list-style-type: none"> • ITEC 241 • ITEC 261 • ITEC 271 • ITEC 281 • ITEC 325 Select two of the following courses: <ul style="list-style-type: none"> • ITEC 200 • ITEC 242 • ITEC 326 • ITEC 336 • ITEC 425 • ITEC 448 • ITEC 486 | Required Courses: <ul style="list-style-type: none"> • ITEC 241 • ITEC 261 • ITEC 271 • ITEC 281 • ITEC 325 Select two of the following courses: <ul style="list-style-type: none"> • ITEC 300 • ITEC 326 • ITEC 336 • ITEC 342 • ITEC 382 (486) • ITEC 425 • ITEC 445 • ITEC 448 | Add ITEC 382 (486) to the electives list. These curriculum revisions bring the ITEC options in line with National Association of Industrial Technology accreditation standards. They also give the students the necessary skills they need to compete for manufacturing positions in modern industry. |

Approved, Effective Fall 2007

| MINOR – ITEC – Manufacturing option - Current Curriculum | Proposed Changes | Analysis/Implications |
|--|--|---|
| Required Courses: <ul style="list-style-type: none"> • ITEC 130 • ITEC 271 • ITEC 281 Select two of the following: <ul style="list-style-type: none"> • ITEC 375 • ITEC 376 • ITEC 385 Select one of the following: <ul style="list-style-type: none"> • ITEC 476 • ITEC 485 • ITEC 486 | Required Courses: <ul style="list-style-type: none"> • ITEC 130 • ITEC 271 • ITEC 281 Select two of the following: <ul style="list-style-type: none"> • ITEC 375 • ITEC 376 • ITEC 382 (486) Select one of the following: <ul style="list-style-type: none"> • ITEC 483 • ITEC 476 • ITEC 485 | Add ITEC 382 (486) and 483 to the elective lists; delete ITEC 385. These curriculum revisions bring the ITEC options in line with National Association of Industrial Technology accreditation standards. They also give the students the necessary skills they need to compete for manufacturing positions in modern industry. |

Approved, effective Fall 2007

Changes in Undergraduate Courses/Curricula:

| MINOR – ITEC – General option - Current Curriculum | Proposed Changes | Analysis/Implications |
|--|--|--|
| <p>Required Courses:</p> <ul style="list-style-type: none"> • ITEC 110 • ITEC 120 • ITEC 130 <p>Select nine credits of electives:</p> <ul style="list-style-type: none"> • ITEC • ITEC • ITEC <p>Select three additional technical lab courses in consultation with the minor program advisor. Two technical lab courses must be at the 300-level or higher.</p> | <p>Required Courses:</p> <ul style="list-style-type: none"> • ITEC 110 • ITEC 120 • ITEC 130 <p>Select nine credits of technical electives in consultation with the minor program advisor. Two technical lab courses must be at the 300-level or higher. and one must be a designated R&D course. (Add ITEC 382, 483, 485 to the list of electives)</p> <ul style="list-style-type: none"> • ITEC • ITEC • ITEC | <p>Add ITEC 382 (486), 483 and 485 to the electives list.</p> <p>These curriculum revisions bring the ITEC options in line with National Association of Industrial Technology accreditation standards. They also give the students the necessary skills they need to compete for manufacturing positions in modern industry.</p> |

Approved, effective Fall 2007

| B.S.E. Technology Education -Current Curriculum | Proposed Changes | Analysis/Implications |
|--|--|--|
| Total required credits for Graduation: 126 | | Total required credits for Graduation: 126 |
| <p><u>Major Field Requirements</u> Technology Literacy Core: 12 credits</p> <ul style="list-style-type: none"> • ITEC 110, 120, 130, 140 <p>Technical Core: 36 credits ITEC 241, 251, 261, 262, 271, 281, 325, 344, 346, 435, and two techn. Lab electives</p> | <p><u>Major Field Requirements</u> Technology Literacy Core: 12 credits</p> <ul style="list-style-type: none"> • ITEC 110, 120, 130, 140 <p>Technical Core: 36 credits ITEC 241, 251, 261, 262, 271, 281, 325, 344, 346, 435, and two techn. Lab electives Add ITEC 382 (486), 483 and 485 to the list of acceptable technology lab electives.</p> | |
| <p><u>Professional Education:</u> 27 credits</p> <ul style="list-style-type: none"> • EDFN 211, 241, EDTE 291, EDTE 391, 496, 461, 491 • Require a minimum grade of "C" for EDTE 291, 391 | | |
| <p><u>Required Related Courses:</u> 15 credits</p> <ul style="list-style-type: none"> • MATH (6.0 - 8.0 credits) • Choose two General Education approved MATH courses. • SCIENCE (3.0 - 4.0 credits) • ADD BIOL 100 as an option of courses recommended for the G2 requirement • BIOL 100, CHEM 103, 205, PHYS 103 • ENGLISH (3.0 credits) • ENGL 312 or ENGL 316 • G1 English Literature course | | |
| <ul style="list-style-type: none"> • G1 Requirements (12 credits) | <ul style="list-style-type: none"> • One ENGL Lit, rr course will satisfy G1 | <ul style="list-style-type: none"> • 9 credits |
| <ul style="list-style-type: none"> • G2 Requirements (12 credits) | <ul style="list-style-type: none"> • BIOL 100 (at least 4 required related courses will satisfy G2 requirement) | <ul style="list-style-type: none"> • 3 credits |
| <ul style="list-style-type: none"> • G3 Requirements (12 credits) | <ul style="list-style-type: none"> • None | <ul style="list-style-type: none"> • 12 credits |
| <ul style="list-style-type: none"> • ENGL 110, COMM 100, P, AW, WELL Requirements (15 credits) | <ul style="list-style-type: none"> • ENGL 312 or 316 required AW course | <ul style="list-style-type: none"> • 12 credits |

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