B.S. in Technology and Science Education

Proposed Program Curriculum

TOTAL CREDITS: 137 credits (minimum)

General Education Requirements (41 credits)

Communication Skills (8cr)
SPCOM 100 Fund of Speech (2cr)
ENGL 101 or 111 Freshmen Comp (3cr)
ENGL 102, 112, or 113 Freshmen Lit (3 cr)

Analytical Reasoning (7cr)
MATH 153 Calculus I (4cr)
STAT 320 Statistical Methods (3cr)

Health and Physical Well-Being (2 cr)
Any Approved Course (2 cr)

Humanities and Fine Arts (9cr)
HIST 210 Modern World (3 cr)
LIT XXX Any Lit Course (3cr)
Other Creative/Performing Arts (1-3cr)
Other Humanities and Fine Arts (0-2cr)

Social and Behavioral Science (9cr)
PSYC 110 General Psych (3cr)
POLS 210 Government (3cr)
Other Social and Behavioral (3cr)

Natural Sciences (4 cr)
BIO 111 Science, Society, and Environment (4 cr)
Note: *Students must complete one life science and one physical science course.*

Technology (2cr)
Any Approved Course (2 cr)

Education (13 credits)

EDUC 303 Educational Psych (3cr)
EDUC 326 Foundations of Education (2cr)
EDUC 336 Multiculturalism (2cr)
EDUC 376 Cross-cultural Experience (1cr)
EDUC 382 Reading & Language Dev (2cr)
SPED 430 Inclusion (3cr)

Science, Technology, and Math Education (33 credits)

STMED 160* Intro (3cr)
STMED 260* Methods, Curric, & Assess I (3cr)
STMED 360 * Prestudent Teaching
STMED 390 * Laboratory and Classroom Mgmt.
STMED 460 * Methods, Curriculum and Assessment II
STMED 409* Student Teaching (16cr)
TECED-325 Tech for Elem Sch Children (2cr)
TECED-340 Middle School T.E. (2cr)
**Courses being revised for the new degree program from existing courses*.

Fundamentals of Technology (17 credits)

RD-205 Design for Industry (3cr)
POWER-260 Intro to Fluid Power (2cr)
MFGT-110 Mat. & Manuf. I (3cr)
Take Two of the following:
MFGT-202 Welding & Casting (3cr)
MFGT-203 Mach. Metal Forming (3cr)
MFGT-204 Polymer Process (3cr)
Take One of the following:
CADD-112 Engineering Drawing I (3 cr)
AEC-131 Architectural Graphics (3 cr)

Human Endeavors (15 credits)

AEC-172 Construction Tech (3cr)
TRANS-202 Transportation (2cr)
TRANS-203 Transportation Lab (1cr)
TRANS-204 Energy Technology (2cr)
TRANS-205 Energy Technology Lab (1cr)
TCS-304 Comm & Info Systems (3cr)
INMGT-314 Industrial Enterprise Practicum (3cr)

Science Courses (18 credit minimum)

Choose at least one DPI major or DPI minor science certification from the list below:

Biology MAJOR Certification (28 credits)
BIO 135 Organismal Biology (4cr)
BIO 136 Molecular Cell (5cr) [Pre: Bio 135]
BIO 332 Genetics (3cr) [Pre: Bio 135]
BIO 350 Ecology (3cr) [Pre: Bio 135]
Additional 13 credits of biology above intro level.

Chemistry MAJOR Certification (28 credits)
CHEM 135 College Chem I (5cr) [Pre: Math 120]
CHEM 136 College Chem II (5cr) [Pre: Chem 135]
CHEM 201 Organic (4cr) [Pre: Chem 135]
CHEM 331 QuantAnalysis (3cr) [Pre: Chem 136]
Additional 11 credits of chemistry above intro level.

Physics MAJOR Certification (28 credits)
PHYS 241 College Physics I (5cr) [Pre: Math 153]
PHYS 242 College Physics II (5cr) [Pre: Phys 241]
PHYS 250 Light&Color (3cr) [Pre: Math 118]
ELEC 260 Elec Circ (3cr) [Pre: Phys241&Math153]
Additional 12 credits of physics above intro level.

DPI Biology Minor Certification (18 credits)
BIO 135 Organismal Biology (4cr)
BIO 136 Molecular Cell (5cr)
Additional 9 credits of biology above intro level.

DPI Chemistry Minor Certification (18 credits)
CHEM 135 College Chem I (5cr)
CHEM 136 College Chem II (5cr)
Additional 8 credits of chemistry above intro level.

DPI Physics Minor Certification (18 credits)
PHYS 241 College Physics I (5cr)
PHYS 242 College Physics II (5cr)
Additional 8 credits of physics above intro level.

Source: Authorization to Implement documents.