MAJOR
Technology education at VCSU has been redesigned for the information age. It is not limited to computers, but provides a variety of hands-on laboratory experiments with many new technologies. It provides awareness and information about a wide variety of technology related careers and non-traditional opportunities, and prepares all students to prosper in an information and technology rich society. It is a perfect time to prepare to become a technology teacher. Job opportunities have never been better. The entire major is available online with the exception of general education type courses. Each student pursuing a teaching degree completes the professional education sequence. These courses include various field experiences providing prospective teachers with an opportunity to observe professional teachers at work and to assist them. Curriculum focuses on design, problem-solving, critical thinking and engineering technology concepts.

STUDENT TEACHING
As a Technology Education major you are placed into schools for a series of field experiences including Introduction to Education (40 hours); Practicum (80 hours); Culturally Diverse Practicum (25 hours involving 3 consecutive full days in a classroom), and a twelve-week student teaching field experience completed in a location that works well for the student and university. Student teaching is the culminating experience of the program and the opportunity for students to apply all they have learned regarding their classroom preparation and field experience opportunities.

TEACHER EDUCATION REQUIREMENTS
Students are typically admitted into Teacher Education during their sophomore year or beginning of their junior year of college. Criteria for admission to Teacher Education is located at the following site: www.vcsu.edu/undergrad_ed/

FACTS ABOUT TECHNOLOGY EDUCATION
• The Technology Education program at VCSU has the first Standards Based curriculum in the nation to be offered completely online.
• The International Technology and Engineering Education Association (ITEEA) estimated a Technology Teacher shortage of 9,000.
• Many states are offering loan forgiveness for Technology Education teachers.
• The Standards for Technological Literacy are endorsed by these professional agencies: NASA, National Science Foundation, Institute for Electrical and Electronic Engineers, National Academy of Engineering, and the National Research Council.

More information about Technology Education available at www.teched.vcsu.edu

CAREER PREPARATION AND ADVANCEMENT OPTIONS
• Major-Technology Education
• Minor-Technology Education
• Masters Degree
• STEM Certificate, Elementary and Secondary

ORGANIZATIONS
• NDTEA
• ITEEA
• CTTE
• ACTE
• NCTL
• Museum of Science, Boston

ACCREDITATIONS
• National Council for Accreditation of Teacher Education
• Higher Learning Commission (NCA)

TECHNOLOGY
• Notebook computers with DVD burners and multimedia capabilities
• Digital cameras, video cameras, and other peripherals
• Blackboard online learning environments

CAREER SERVICES PROVIDES
• Career, job search, placement services free to all students
• Field trips, employer on-campus visits
• Information, networking opportunities and skill development
• Visit www.vcsu.edu/careerservices/

QUOTES
“Being able to take courses online at VCSU has allowed me to continue my education in a way that fits my schedule. The curriculum being delivered at VCSU can be used immediately in my current position. I have found the staff to be exceptionally caring, helpful and always available. The quality of the program and commitment from the staff to work with and meet the student needs are why I decided on VCSU.”

~Annette, Jackson, MI

“The Technology Education Program at Valley City State University is a wonderful program for both the traditional and non-traditional college student. On campus students can take advantage of a top rate facility and some of the best instructors in the nation. The online delivery allows the distance student to get detailed instruction for coursework and laboratory experiments from the convenience of home. As a distance student with a full time job, this program is making it possible to complete my degree.”

~Greg, Lisbon, ND
Technology Education

MAJOR

The Technology Education program is based on Standards for Technological Literacy, and supports standards in science, engineering and mathematics. Technology Education stresses design, critical thinking skills and problem-solving abilities and provides to the student career awareness and information about a wide variety of technology related careers and non-traditional opportunities, and prepares all students to prosper in an information and technology rich society. VCSU is a recognized leader in the nation for preparing technological literate technology education teachers.

LEARNING OUTCOMES

1. Methodology – Students will develop knowledge necessary for program development, implementation, evaluation and assessment of student learning.
2. Content – Students will acquire knowledge and skills necessary to demonstrate competence in technological literacy
3. Application – Students will demonstrate competency in technology education content and apply this knowledge in real world experiences.

ABILITIES

Collaboration
Communication
Effective Citizenship
Problem Solving
Technology

For degree and graduation requirements see pages 39-40.

Department Chair
Peder Gjovik, Ph.D.
McCarthy Hall 155
(701) 845-7448

Technology Education

General Education Requirements 39 Hours
Communication & Collaboration 9 Hrs
ENGL 110 College Composition I
ENGL 120 College Composition II
- or - ENGL 125 Intro to Professional Wrtg
COMM 110 Fund of Public Speaking
- or - COMM 212 Interpersonal Comm
- or - COMM 216 Intercultural Comm

Problem Solving 11 Hrs
Mathematics - 3 crs (Select one course)
MATH 103 College Algebra
MATH 104 Finite Mathematics
MATH 107 Precalculus
MATH 165 Calculus I
Lab Science - 8 crs (Select two courses)
BIOL 111, 115, 151, 170, 220, 221
CHEM 115, 116, 121, 122
GEOL 100, 106
PHYS 100, 110, 161, 162, 251, 252
TECH 161

Technology (Select one course) 3 Hrs
CIS 170 Intro to Computer Info Systems
CSCI 127 Intro to Programming in Java
CSCI 160 Intro to Structured Programming

Wellness 2 Hrs
HPER 100 Concepts Fitness & Wellness

Aesthetic Engagement 6 Hrs
Literacies - 3 crs (Select one course)
ENGL 220, 225, 241, 242, 261, 262
HUM 201 Civil, Thought, & Lit Heritage
SPAN 201 2nd Yr I; SPAN 202 2nd Yr II
THEA 110 Intro Theatre; THEA 161 Acting I
Art & Music - 3 crs (Select one course)
ART 110 Introduction to Visual Arts
HUM 202 Fine Arts & Aesthetics
MUS 100 Music Appreciation
MUS 101 Music Fundamentals
MUS 207 History of Rock’n’Roll

Global Awareness & Effective Citizen 6 Hrs
(Select two courses)
COMM 112 Under Media; COMM 114 Human;
ECON 201 Micro; ECON 202 Micro Macroecon
GEOG 151 Human Geog
HIST 103, 104, 211, 212, 260, 267, 270
POLS 115 Amer Gov; POLS 116 State Gov
PSYC 111 Intro Psyco
SOC 110 Intro to Soc; SOC 116 Intro Anthro

Additional General Education 2 Hrs
Select one additional course from the area of
Aesthetic Engagement or Global Awareness
or
ART 112 (3), ART 231 (3), ART 281 (3), GEOG 111
(2), MUS 104 (1), MUS 105 (1), MUS 131 (1), MUS
141 (1), PHYS 275 (1), THEA 201 (1-3)
*Required

Required Courses 33 Hours
TECH 256 Resources for Technology
TECH 256L Resources for Tech Lab
STEM ED 306 Inv & Innov Tech Ed Child
STEM ED 306L Inv & Innov Tech Ed Child Lab
STEM ED 310 Design Tech & Eng for Elem
STEM ED 310L Desn Tech & Eng Elem Lab
TECH 330 Exploring Technology
TECH 330L Exploring Technology Lab
STEM ED 331 Innov & Engineering Design
STEM ED 331L Innov & Engineer Design Lab
STEM ED 342 Building Math
TECH 371 Technology Systems
TECH 371L Technology Systems Lab
STEM ED 411 STEM Curriculum and Methods
TECH 416 Innovations in Technology
TECH 416L Innovations in Tech Lab
STEM ED 431 Design for Engineering
STEM ED 431L Design for Engineering Lab
TECH 450 Engineering the Future

Directed Electives 6 Hrs
TECH 300 3D Modeling & Design
TECH 300L 3D Modeling & Design Lab
STEM ED 355 STEM Curriculum & Methods Elem
TECH 391 Foundations of Technology
TECH 391L Foundations of Tech Lab
TECH 394 Independent Study
TECH 456 Intelligent Machines
TECH 456L Intelligent Machines Lab
TECH 478 Technology Assessment
TECH 478L Technology Assessment Lab
TECH 495 Senior Problems

Professional Education Sequence 31-32 Hrs
EDUC 240 Educating Exceptional Students
EDUC 260 Introduction to Education
EDUC 283 Understanding Cult Div in Educ
EDUC 300 Educational Technology
EDUC 352 Culturally Diverse Practicum
or EDUC 464 Pract in ELL Classroom
EDUC 351 Sec Practicum & Clsrm Mngt
EDUC 352 Sec Practicum & Clsrm Mngt
EDUC 375 Tech Ed in Content Areas
EDUC 400 Educational Psychology
EDUC 450 Trends in Assess & Educ Issues
EDUC 480 Student Teaching (Sec)

STEM ED 355 STEM Curriculum and Methods
STEM ED 371 Technology Systems
STEM ED 431 Design for Engineering
STEM ED 431L Design for Engineering Lab
TECH 450 Engineering the Future

Total General Education 39 Hrs
Total Major Requirement 39 Hrs
Total Professional Ed Sequence 31-32 Hrs
Total Credits Needed to Graduate 120 Hrs