**CURRICULUM AND INSTRUCTION**

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**Introduction**

The Teacher Education Master's program in Curriculum and Instruction is a totally online program, focusing on the development of professional practitioners committed to quality teaching and committed to the belief that all children can learn. Central to the development of such professionals is the refinement of competencies in the areas of teaching, learning, assessment, technology, and communication. Students admitted to this program will choose one of five possible specialization areas: literacy, digital teaching and learning, teacher leadership, STEM, mathematics or general studies. The Literacy specialization will support an increased depth of knowledge and skills in the area of language arts and reading. Digital Teaching and Learning will focus on the paradigm shift in teaching that utilizes technology as an effective tool in 21st-century classrooms, P-12. The specialized area of Teacher Leadership will support an increased depth of knowledge and skills in the area of Informal and Formal Leadership in and out of the classroom and is aligned to the new Ohio Teacher Leadership Standards. STEM will focus on the implementation of STEM curriculum in the P-12 curriculum through inquiry based learning. Mathematics will support an increased depth of knowledge needed to teach mathematics competencies at the high school level. The general studies option is for students who want to obtain a C&I degree without an area of specialization. Courses for general studies may come from any department at YSU and may, or may not, be offered online.

The program is delivered in a fully online format (https://online.ysu.edu/degrees/education/).

For more information about the Department of Teacher Education, please contact the Teacher Education Office at (330)-941-3251.

**Mission**

The Department of Teacher Education's mission is to empower teachers for professional practice. The mission commits the faculty to a theme of critical reflective practice where candidates are engaged in activities that build on their knowledge, skills, and dispositions related to effective teaching. Faculty members are committed to educating practicing professionals in the areas of: scholarship, teaching, leadership, management, communication, and interpersonal relations. The Department also offers a variety of professional development courses and workshops.

**Accreditation**

The master's programs in the Department of Teacher Education are accredited by the National Council for Accreditation of Teacher Education (NCATE). http://www.ncate.org/.

**Curriculum and Instruction Program**

The Curriculum & Instruction program is a comprehensive program completely related to curriculum and instruction in the classroom. Additionally, this programs gives students the opportunity to take other related courses of interest.

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<thead>
<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>TCED 6905</td>
<td>Introduction to Digital Teaching and Learning</td>
<td>3</td>
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**Areas of Specialization**

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<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>TCED 6906</td>
<td>Designing Curriculum for the 21st Century Learner</td>
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<tr>
<td>TCED 6907</td>
<td>Literacy for Digital Teaching and Learning</td>
<td>3</td>
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<tr>
<td>TCED 6908</td>
<td>Digital Learning Environments</td>
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<tr>
<td>TCED 6910</td>
<td>Leadership for the 21st-Century</td>
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<td>TCED 6911</td>
<td>Coding for Educators</td>
<td>3</td>
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<tr>
<td>TCED 6912</td>
<td>Gaming for Educators</td>
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**Teacher Leadership**

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<th>COURSE</th>
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<tbody>
<tr>
<td>EDAD 6901</td>
<td>Instructional Leadership Beyond the Classroom</td>
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<tr>
<td>EDAD 6903</td>
<td>Building Capacity of Adult Learners</td>
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<tr>
<td>EDAD 6905</td>
<td>Culturally Responsive Teaching and Learning</td>
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<td>EDAD 6906</td>
<td>Data- Coaching and Decision Making</td>
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<td>EDAD 6933</td>
<td>Educational Leadership and Organizational Change</td>
<td>3</td>
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<tr>
<td>EDAD 6954</td>
<td>Community Engagement and Collaborative Partnerships</td>
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**STEM**

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<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>TCED 6940</td>
<td>Foundations of STEM Education Theory to Practice</td>
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<tr>
<td>TCED 6941</td>
<td>Engineering and Technology Inquiry</td>
<td>3</td>
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<td>TCED 6942</td>
<td>Environmental Inquiry</td>
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<td>TCED 6943</td>
<td>STEM Integration in the P-12 Classroom</td>
<td>3</td>
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<tr>
<td>TCED 6944</td>
<td>A Global Perspective</td>
<td>3</td>
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<td>TCED 6945</td>
<td>STEM Leadership</td>
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**Mathematics**

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<tr>
<td>MATH 5825</td>
<td>Advanced Linear Algebra</td>
<td>3</td>
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<tr>
<td>MATH 6995</td>
<td>Special Topics (Analysis for Teachers)</td>
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<tr>
<td>MATH 6995</td>
<td>Special Topics (Algebra for Teachers)</td>
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<tr>
<td>MATH 6995</td>
<td>Special Topics (Discrete Math for Teachers)</td>
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<tr>
<td>MATH 6995</td>
<td>Special Topics (History of Mathematics)</td>
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In this program you will learn to:

- Teacher Leadership;
- specific standards.

Advanced program completers learn and apply specialized content and discipline knowledge contained in approved state and/or national discipline-specific standards.

### General Learning Outcomes

Candidates develop a deep understanding of the critical concepts and principles of their field of preparation and, by completion, are able to use professional specialty practices flexibly to advance the learning of all P-12 students toward attainment of college- and career-readiness. Candidates apply knowledge and skills appropriate to their professional field of specialization so that learning and development opportunities for all P-12 students can be improved through:

- applying data literacy;
- using research and understanding of qualitative, quantitative and/or mixed methods research methodologies;
- employing data analysis and evidence to develop supportive school environments;
- reading and/or participating in collaborative activities with others such as peers, colleagues, teachers, administrators, community organizations, and parents;
- supporting appropriate applications of technology for their field of specialization;
- applying professional dispositions, laws, and policies, codes of ethics and professional standards appropriate to their field of specialization.

Advanced program completers learn and apply specialized content and discipline knowledge contained in approved state and/or national discipline-specific standards.

### Specific Specialization Outcomes

### Teacher Leadership

In this program you will learn to:

- promote an inclusive, equitable, and collaborative culture among staff members.
- implement evidence-based strategies and research to improve practice and student learning.
- facilitate professional learning by utilizing adult learning principles.
- employ evidence-based leadership practices to drive school improvement initiatives.
- make effective data-based decisions which lead to school improvement.
- strengthen relationships and partnerships with school and community stakeholders.
- advocate for student learning and the teaching profession.

### Digital Teaching and Learning

In this program, you will learn to:

- explore and embrace the new paradigm shift in digital teaching and learning that supports students to be entrepreneurs of their own learning.
- meet the challenge of moving into a more personalized, student-centered approach to teaching.
- identify and implement research-based teaching methods that enhance digital learning in P-12 classrooms and support 21st-century teaching and learning.
- evaluate, select, and integrate effective learning technologies to enhance student learning and prepare students for a digital world.
- create digital learning environments that promote and sustain respectful digital citizens.
- develop and utilize leadership skills that empower educators to be effective change agents in their schools and districts.

### Literacy

In this program, you will learn to:

- establish and maintain a child-centered classroom culture that provides diverse learning opportunities, materials, and practices for all students.
- develop a system of providing instructional support to peers using student data, observations, model teaching, conferencing, and staff development.
- assure that all aspects of literacy learning and usage are applied in every content area.
- recognize the developmental nature of spelling and phonics learning and use when selecting and critiquing resources and activities in order to sequence instruction.
- incorporate all aspects of literacy assessment, curriculum development, materials selection, lesson design, instruction, and self-reflection as a means to improving the learning of all students.
- apply a multifaceted approach to assessment as a means of obtaining authentic information about the strengths and needs of diverse students for the purposes of instructional decision-making.

### Math

In this program, you will learn to:

- describe connections between discrete mathematics, abstract algebra, real analysis and the high school classroom.
- develop the ability to read and understand advanced mathematical definitions, theorems, and proofs.
- develop the ability to communicate in mathematics and produce well-written proofs.
- connect algebraic concepts and theory to the high school classroom.
- analyze historical sources of mathematics and summarize their major results.
- employ various proof techniques to verify mathematical arguments.
- explain the fundamental discrete mathematical structures and their importance.
- implement proper statistical data analysis techniques to model and analyze complex problems, and demonstrate competence in analyzing data.
- communicate statistical ideas clearly in oral and written forms using appropriate statistical terminology and generate reports that show statistical expertise in writing and model implementation.
STEM

In this program you will learn to:

• clarify the definition of STEM in the context of K-12 science education.
• investigate the impact of state and national policies on the trends in STEM education.
• identify the historical changes in K-12 Science Education and evaluate the present status of K-12 Science Education in their state and school district.
• evaluate the characteristics of effective STEM programs and learning environments.
• develop the ability to apply knowledge of math, science and the principles of environmental engineering applications to formulate and solve environmental engineering programs for different grade levels.
• develop the knowledge necessary to understand the impact of environmental engineering solutions in a global/societal context as well as contemporary issues.
• design lessons that engage groups of students in STEM education through pedagogical strategies of social interactions, cooperative learning, inquiry-based and project-based learning that focus on meaningful and constructivist experiences to solve real-world problems.

Admission Requirements

In addition to the minimum College of Graduate Studies admission requirements, applicants must have the following:

• A bachelor’s degree from a college or university certified by a regional accrediting agency approved by the U.S. Department of Education.
• Valid teaching license
• Cumulative GPA in undergraduate work of at least a 2.5 on a 4.0 scale.
• Students with a GPA of 2.5–2.99 must present a satisfactory score on the general test of the GRE with scores of 150 verb., 148 quant., and 4.0 writing.
• Students with a GPA of 3.0 or above are eligible for a GRE waiver
• 3 references that include: name, email and phone number