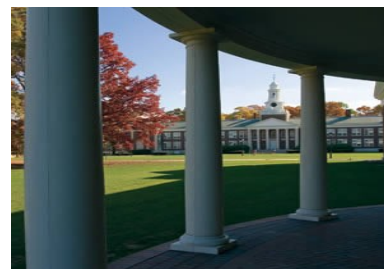


THE COLLEGE OF NEW JERSEY

GRADUATE PROGRAMS

Graduate study at TCNJ stresses inquiry, critical thinking, intellectual integrity, and professional collaboration with the goal of preparing students to be leaders who make a difference.

For the 17th consecutive year, TCNJ has been named as the top public college on *U.S. News and World Report's* list of Best Universities-Master's category for the northern region of the country.



FOCUS ON: M.Ed. in Integrative Science, Technology, Engineering & Math (i-STEM)

This program offers an intellectually stimulating course of study that provides in-service teachers with current, integrative, design-centric teaching and learning methods applicable across PK-12 grade levels. Key components of the i-STEM M.Ed. program include:

- **Integrative:** Substantial emphasis on *Integrative* methods, between the four STEM components but equally importantly including connections with non-STEM content areas.
- **Design Pedagogies:** Design pedagogies can be described as design-centric Problem/ Project Based Learning (PBL) methods, and are covered extensively. Design processes (the “T&E” of STEM) require higher levels of cognitive thinking, and importantly, often include highly contextualized frameworks.
- **Content Area Knowledge:** Content in individual STEM areas are covered throughout the program, both in Methods as well as Content courses, yielding valuable content/context specific applicability. Additional NJ State content endorsements may be possible depending on individual's backgrounds.
- **Practical Approach:** Gives teachers practical knowledge & skills, including curricular units/ writing, inclusive practices, and connections to educational standards (Next Generation Science Standards, Common Core, 21st Century skills, ... etc.). Practical TCNJ or NJ State certification paths are possible [ex.: (i) NJ State Supervisor certification, (ii) TCNJ i-STEM Methods certificate, (iii) TCNJ i-STEM Special Ed. certificate ... etc.]

The Department of Technological Studies in the School of Engineering at TCNJ is a national leader in PK-12 STEM education.

Department of Technological Studies • 609.771.2543 • technologicalstudies.tcnj.edu



Department of Graduate Studies

Phone: 609.771.2300 • graduate.tcnj.edu • graduate@tcnj.edu



Program Announcement:

Masters of Education in Integrative Science, Technology, Engineering and Math (i-STEM) and Integrative STEM Methods Certificate

**The Department of Technological Studies at The College of New Jersey
is pleased to announce a new graduate degree and certificate program.
Applications are currently being accepted for Summer 2016.**

The i-STEM Masters of Education Program is geared for certified teachers and consists of three categories of requirements: (I) i-STEM Teaching & Learning Core (15 credits), (II) STEM Ed. Content & Research courses (9 credits) and (III) Electives (12 credits). Electives enable the completion of more specialized curricular pathways, culminating in Masters of Education, TCNJ college certificates and/ or a NJ State Supervisor certification.

This 12-course program of advanced study is grounded in applying design process concepts and skills to PK-12 teaching. Evening and summer classes allow working adults to successfully complete the program.

The College of New Jersey (TCNJ) is a recognized national leader in integrative-STEM (i-STEM) educational methods. In 1998, TCNJ's Dept. of Technological Studies, housed within the School of Engineering, established likely the first elementary i-STEM pre-service teacher preparation program in the country. This undergraduate program is often one of the largest education majors on campus. Many recent standards (Common Core, Next Generation Science and 21st Century skills) are highly consistent with the design pedagogy philosophy used in i-STEM methods. Design pedagogy uses the T&E components of STEM to set valuable educational contexts, useful for STEM and non-STEM teachers. For example, concepts such as authentic problem-based learning, engineering (design under constraints), teamwork, creativity and integrative/ cross-curricular connections are key attributes of TCNJ's i-STEM programs.

The priority consideration deadline for applying for Summer 2016 is February 1, 2016, and the final deadline is May 1st. For further program information, contact Dr. Steve O'Brien, Chair, Technological Studies Department, obriens@tcnj.edu.

An application, and information regarding required supplemental documents, can be obtained through the Office of Graduate Studies at graduate.tcnj.edu.

