

College of Applied Science and Technology

Technical Mathematics

Certificate (203001C)

The following information has official approval of The University of Akron's College of Applied Science and Technology but is intended only as a guide. Completion of this certificate is contingent upon many factors, including but not limited to class availability, total number of required credits, work schedule, finances, family, course drops/withdrawals, successfully passing courses, and prerequisites, among others.

This certificate is aimed at developing technical mathematics knowledge and the ability to apply this knowledge in an industrial setting. The granting of this certificate does not require the completion of a degree. However, coursework can be applied to an A.A.S. degree or to B.S. degrees in Engineering Technology, CIS-Digital Forensics, or CIS-Cybersecurity. A minimum of 11 credit hours is required for completion of the certificate with a minimum grade point average of at least 2.5 in courses taken for the certificate. At least 6 of the 11 credit hours must be taken through the College of Applied Science and Technology.

✓	Required Courses (8 credits minimum)		Credits	Prerequisites
	2030:154	Technical Mathematics IV	3	2030:153 or equivalent with a grade of C- or better, or placement test
	2030:216	-OR- Applied Finite Mathematics	3	2030:153 with a grade of C- or better, or placement test
	2030:255	-OR- Technical Calculus I	3	2030:154 or equivalent with a grade of C- or better, or placement test
	2030:356	-OR- Technical Calculus II	3	2030:255 or equivalent with a grade of C- or better, or placement test
	2030:361	-OR- Applied Cryptography	3	A grade of C- or better in either 2030:154 or 2030:216
	2030:461	-OR- Applied Cryptanalysis	3	2030:361 with a grade of C- or better
	2030:480	-OR- Advanced Topics in Technical Mathematics	2	2030:255 or equivalent with a grade of C- or better, or placement test
	Subtotal Required Courses		8* or 9	
	Subtotal Electives		2 or 3	
	Grand Total Credits for Certificate		11	

✓	Electives (2 credits minimum)		Credits	Prerequisites
	2030:216	Applied Finite Mathematics	3	2030:153 with a grade of C- or better, or placement test
	2030:260	-OR- Advanced Trigonometry	2	2030:153 or equivalent with a grade of C- or better, or placement test
	2030:345	-OR- Technical Data Analysis	2	2030:154 or equivalent with a grade of C- or better, or placement test
	2030:361	-OR- Applied Cryptography	3	A grade of C- or better in either 2030:154 or 2030:216
	2030:461	-OR- Applied Cryptanalysis	3	2030:361 with a grade of C- or better
	2030:480	-OR- Advanced Topics in Technical Mathematics	2	2030:255 or equivalent with a grade of C- or better, or placement test
	2030:290	-OR- Special Topics	1-4	Permission
	-OR- 3450:200/300/400-level mathematics courses approved by the Technical Mathematics faculty of the Department of Applied General and Technical Studies		1-4	See Bulletin

*If only 8 credits are taken from the core course list, then 3 credits must be taken from the electives in order to meet the minimum 11 credit requirement for the certificate.

To apply, go to CAST Advising Services, Polsky 301. **Website:** <http://www.uakron.edu/agts/index.dot>

Certificate Contact: Katie Cerrone, Polsky 131, 330-972-8809 or kc24@uakron.edu