Semester

MASTER OF SCIENCE IN SYSTEMS ENGINEERING, AUTOMATION CONCENTRATION (MS)

CIP: 14.2701.00

A student applying to MS SENG program should submit and/or meet the following requirements:

- A minimum 3.0 GPA, which will require the submission of official transcripts from all universities or colleges attended.
- A B.S. in Systems Engineering, other engineering degrees, or closely related degrees on a case-to-case basis (i.e., Computer Science, Mathematics, Applied Physics, and Statistics) from an accredited institution.
- 3. A minimum GRE Quantitative score of 152 and a minimum GRE Verbal score of 148 (total GRE score of 300).
- 4. Submission of a 750-word essay outlining the applicant's background, education, and professional goals.
- 5. A professional resume of no more than two pages.
- 6. Two letters of recommendation (professional and/or academic references)

International students who are neither U.S. citizens nor U.S. permanent residents (or green card holders) should submit and meet the following as per the graduate school requirements at TAMIU.

- 1. A TOEFL score of at least 79 is required.
- 2. Bank statement
- 3. Copy of current U.S. visa
- 4. Copy of I-20
- 5. Financial Statement Form
- 6. International Student Transfer Form

Admitted students deemed by the program's admissions committee to possess a background in either science, mathematics, and/or related disciplines may be asked to enroll for one or several online foundational courses offered in sub-terms (7 week duration) prior to beginning the MS SENG program. These foundational courses are designed to provide admitted students the prerequisite statistical, mathematical, programming, and/or basic engineering knowledge and skills to engage the content of the MS SENG program. These foundational courses include, but are not limited to:

- 1. Numerical Methods of Engineering
- 2. Foundations of Programming and Computational Tools
- 3. Foundations of Engineering

The MS SENG program's admissions committee will determine the need for admitted students to enroll for and complete a foundational course, or courses, on a case-by-case basis. Note, more foundational courses may be created as necessary and determined by the graduate program director to provide admitted students the knowledge and skills necessary to engage the MS SENG program's content.

Degree Plan Major Curriculum - Systems Engineering, Automation Concentration

Title

Code

		Credit Hours
Required Cou	rses	
SENG 5300	Systems Engineering Management	3
SENG 5310	Engr Computational Tools	3
SENG 5320	Logistics & Quality Ctrl Engr	3
SENG 5330	Advanced Systems M&S	3
Concentration	1	
SENG 5360	Intelligent Control	3
SENG 5362	Advanced CAD/CAM Systems	3
SENG 5364	Adaptive & Autonomous Systems	3
SENG 5366	Signal and Image Processing	3
Thesis		
SENG 5398	Thesis I	3
SENG 5399	Thesis II	3
Total Semester Credit Hours		30