



## International Master of Science Program in Computational Mechanics

**Program Announcement :** Tunisia Polytechnic School (TPS) is one of the leading Engineering schools in Tunisia. Building on its proven education record, TPS has launched a 16 month International Master of Science Program in Computational Mechanics since 2003 with financial support from the U.S. State Department. This is the first Tunisian graduate degree in Engineering offered in English. The coursework is taught by faculty members from Tunisia and Virginia Tech, USA, in addition to professors from selected European and North American universities.

The emphasis of the program is on the application of advanced computational methods and experimental techniques in the areas of solid mechanics, fluid mechanics, dynamics and control, and biomechanics. Ten graduate students of this program are currently pursuing their Ph.D. studies with a scholarship provided by major American universities.

**Program Objective :** This program is designed to meet the increasing demand for research-oriented graduates capable of using advances in computational mechanics and experimental techniques with applications in the areas of Mechanical, Civil, Materials, Biomedical and Petroleum Engineering.

**Program Organization :** For the academic year 2009/2010 , classes start on September 1st, 2009. The first nine months are divided into three quarters for complete coverage of the coursework. By the end of the second quarter, the student is expected to select a Master's research topic. This leaves the student a period of approximately nine months to accomplish a research of high standing. Depending on the English language proficiency, students are expected to follow a one-week intensive English program in addition to regular English courses offered during the nine months of coursework.

**Program Coursework :** The core coursework is made of seven required courses spread over the first two quarters. The core courses include Continuum Mechanics, Structural and Solid Mechanics, Finite Element Method I, Vibrations, Control of Structures, Fluid Mechanics and Finite Element Method II. Students who succeed in these courses will take two research oriented courses from the following list which includes Mechanical Models for Material Behavior, Random Vibrations, Perturbation Methods, Turbulence and Turbulent Flows, Topics in Biomechanics and Structural Optimization. Detailed information about these courses can be found in <http://www.esm.vt.edu/~anayfeh/cmgp/tps/coursework.html>.

**Admission Requirements :** Admission is open to Tunisian and international students with an engineering diploma closely related to the mechanics field.

### The admission file comprises the following :

- Application form
- Certified copy of the Bachelor of Science or Diploma
- Transcripts
- Test of English as a Foreign Language (TOEFL)
- Two recommendation letters
- Two photos
- Two envelopes with stamps

The application and the recommendation forms can be downloaded from <http://www.esm.vt.edu/~anayfeh/cmgp/tps/admission.html>.

Application forms will be accepted any time between June 15th, 2009 and July 10th, 2009. The application files will be carefully examined by a CMGP committee. Accepted students will be notified by regular mail, by Fax or by Email before August 15th 2009.

### Contact and Information

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**Program website : <http://www.esm.vt.edu/~anayfeh/cmgp-tps/default.html>**

