



## **Post-Master Certificate - Advanced Studies in Smart Enterprises & Cities**

The purpose of this certificate is to allow a student with an Information Systems Engineering and Management master's degree to further their knowledge in chosen areas. In particular, the student will be able to pursue areas of interest both within and outside of ISEM to create a tailored body of knowledge at a higher level of achievement than the master's degree. The student will be able to use this knowledge in pursuit of career choices and in additional educational pursuits.

### **Program Goals**

The student completing the Advanced Studies in Smart Enterprises Certificate will be able to:

- Articulate knowledge of various system components associated with digital enterprises;
- Recognize the interrelationship between various system components; and,
- Formulate the design and planning processes involving information, engineering, and management systems.

### **Advanced Studies in Smart Enterprises Certificate Requirements**

The following courses comprise the Advanced Post-Masters Certificate in Digital Enterprises program – 18 semester hours. The semester hour value of each course appears in parentheses ( ). Complete all the following courses – 18 semester hours:

- ISEM 775 Advanced Design Project (3)
- ISEM 600-700 level course (3)
- Any other graduate course (12)

#### **Exhibit1: Example of an Advanced Studies Program in Smart Enterprises**

**Student Objective:** Study of Intrusion Tolerant Smart Cities

**Assumption:** Student has already completed an MS in ISEM or equivalent with coursework that includes ISEM500, ISEM540, MGMT510, ISEM503, ISEM530, ISEM565, ANLY500 and several other diverse electives.

**Sample Program of Study** (assuming that student has not taken the following ISEM electives):

Semester1:

- ISEM572: Smart Cities and Strategic Intelligence
- ISEM 558: IoTs and Embedded Systems

Semester2:

- ISEM 550: Information Security Management or another suitable elective
- ISEM 574: Block Chains and Bit Coins

Semester3:

- ISEM775: Advanced Design Project (Develop Design of an Intrusion Tolerant City)
- Any suitable ISEM 700 level course