

**MASTER OF SCIENCE  
MAJOR IN DATACENTER SYSTEMS ENGINEERING  
GRADUATE DIVISION – SMU-LYLE SCHOOL OF ENGINEERING**

SMU ID #: \_\_\_\_\_ Name: \_\_\_\_\_

Home Address: \_\_\_\_\_ Home Phone: \_\_\_\_\_

Business Address: \_\_\_\_\_ Business Phone: \_\_\_\_\_

ARTICULATION COURSE(S)	Course Title	Instructor	Hrs.	Semester	Grade
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

**CORE COURSES – 15 hours**

CSE 7346 _____	Cloud Computing & Virtualization Technologies _	_____	3	_____	_____
CSE 7349 _____	Data and Network Security_____	_____	3	_____	_____
EE 7301 _____	Power Mgmt for Industrial & Mission Critical Fac	_____	3	_____	_____
EMIS 7357 ____	Analytics for Decision Support _____	_____	3	_____	_____
CEE/ME 7380 _	Mgmt of Industrial & Mission Critical Facilities _	_____	3	_____	_____

**GROUP 1 ELECTIVES (see selections on back) 9 hours**

- Specialization 1 – Facilities Infrastructure Management
- Specialization 2 – Data Engineering & Analytics
- Specialization 3 – Networks, Virtualization & Security
- Specialization 4 – Business

_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

**GROUP 2 ELECTIVES - 6 hours – With approval of academic advisor, graduate level courses from the Lyle School of Engineering, Cox School of Business, Dedman College Departments of Physics, Chemistry, Mathematics or Statistics**

_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

TOTAL HOURS (Minimum 30) \_\_\_\_

APPROVED \_\_\_\_\_  
Advisor / Date
Department Head / Date

\_\_\_\_\_  
 Director of Graduate Division / Date

***Specialization in Facilities Infrastructure Management***

CEE 7325 Disaster Management  
CEE 7370 Facilities Planning  
CEE 7366 Introduction to Facilities Engineering Systems  
CEE 7369 Electrical Mechanical and Piping Systems for Buildings  
CEE 7384 Energy Management for Buildings  
EETS 7307 Telecommunications for Data Systems Engineering  
EMIS 7347 Critical Infrastructure Protection/Security Systems Engineering  
EMIS 8363 Engineering Finance, ME 7330 Heat Transfer  
ME 7335 Convection Cooling of Electronics  
ME 7336 Intermediate Fluid Dynamics  
ME 7344 Conductive Cooling of Electronics  
ME/CEE 7383 Heating, Ventilating and Air Conditioning  
ME 8385 Conduction Heat Transfer  
ME 8387 Radiation Heat Transfer  
CEE/ME 7381 Site Selection for Industrial & Mission Critical Facilities

***Specialization in Data Engineering and Analytics***

CSE 7330 File Organization and Database Management  
CSE 7340 Service Oriented Computing  
CSE 7347 XML and the Enterprise  
CSE 8316 User Interface Design  
CSE 8321 Machine Learning and Neural Networks  
EMIS/CSE 8331 Data Mining  
EMIS/CSE 8337 Information Retrieval  
EMIS 7352 Information System Architecture  
EMIS 7353 Information Systems Design Strategy

***Specialization in Networks, Virtualization, Security***

EMIS 7382 Information Technology Security and Risk Management  
EMIS 8364 Engineering Management  
EMIS 8356 Information Engineering: A Global Perspective  
CSE 7339 Computer System Security  
CSE 7344 Computer Networks and Distributed Systems  
CSE 7359 Software Security  
CSE 8343 Advanced Operating Systems (Virtualization)  
CSE 8349 Advanced Network and System Security  
CSE 8352/EE 8372 Cryptography and Data Security  
EETS 7304 Network Protocols  
EETS 8311 Intelligent Networks

***Specialization in Business***

EMIS 8362 Engineering Accounting  
FINA 6201 Managerial Finance  
ITOM 6202 Management Decision Analysis  
RE 6211 Real Estate Investment