

**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

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

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 5/7381 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