SMU. Lyle School of Engineering

MASTER OF SCIENCE IN QUANTUM ENGINEERING

SMU ID #: _____   Name: _____

SMU Email: _____   Phone: _____

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

CORE COURSES – 9 Hours

CS/OREM 7370	Probability and Statistics for Data Analytics _____	_____	3 __	_____	_____
OR					
ECE 7375 _____	Random Processes in Engineering _____	_____	3 __	_____	_____
CS/ECE 7383 _____	Introduction to Quantum Informatics _____	_____	3 __	_____	_____
CS/ECE 7384 __	Introduction to Quantum Computing _____		3 __	_____	_____

Elective Courses (see list of courses on back of plan) 21 hours of course work or 15 hours of course work and 6 hours of thesis credit.

_____	_____	_____	___	_____	_____
_____	_____	_____	___	_____	_____
_____	_____	_____	___	_____	_____
_____	_____	_____	___	_____	_____
_____	_____	_____	___	_____	_____
_____	_____	_____	___	_____	_____
_____	_____	_____	___	_____	_____

TOTAL HOURS (Minimum   30)   ___

APPROVED _____

Advisor / Date   Department Head / Date

_____

Director of Graduate Division / Date

All Lyle graduate degrees must be completed within a 7 year window. Most courses are offered during alternating semesters to allow some flexibility. Sample tracks for completion are shown below:

Fall - 2 courses Spring - 2 courses
Fall - 2 courses Spring - 2 courses
Fall - 2 courses Graduation in Fall term (2.5 years)

Fall - 1 course/Spring - 1 course - year 1 - 2 courses
Fall - 1 course/Spring - 1 course - year 2 - 2 courses
Fall - 1 course/Spring - 1 course - year 3 - 2 courses
Fall - 1 course/Spring - 1 course - year 4 - 2 courses
Fall - 1 course/Spring - 1 course - year 5 - 2 courses
Graduation in Spring term of year 5

- [CS 7339 - Computer System Security](#)
- [CS 7349 - Data and Network Security](#)
- [CS 7350](#)/[OREM 7350 - Algorithm Engineering](#)
- [CS 8350](#)/[OREM 8350 - Algorithms II](#)
- [ECE 7310 - Introduction to Semiconductors](#)
- [ECE 7312 - Compound Semiconductor Devices and Processing](#)
- [ECE 7322 - Semiconductor Devices and Fabrication](#)
- [ECE 7330 - Electromagnets: Guided Waves](#)
- [ECE 7335 - Quantum Electronics](#)
- [ECE 7336 - Introduction to Integrated Photonics](#)
- [ECE 7377 - Embedded Wireless Design Lab](#)
- [ECE 7379 - Optimization in Wireless Networks](#)
- [ECE 7381](#)/[CS 7381 - Computer Architecture](#)
- [ECE 8310 - Electronic Processes](#)
- [ECE 8322 - Semiconductor Optical Systems](#)
- [ECE 8323 - Lasers and Photonics](#)
- [ECE 8325 - Infrared Systems Engineering](#)
- [ECE 8371 - Information Theory](#)
- [ECE 8372](#)/[ECE 8372 - Cryptography and Data Security](#)
- [MATH 6341 - Linear and Nonlinear Waves](#)
- [MATH 6343 - Photonics Modeling and Simulations](#)
- [OREM 7361 - Simulation for Systems Analytics](#)
- [OREM 8370 - Stochastic Models](#)
- [PHYS 6335 - Quantum Mechanics I](#)
- [PHYS 6336 - Quantum Mechanics II](#)
- [PHYS 6338 - Condensed Matter Physics](#)
- [PHYS 6351 - Statistical Mechanics](#)
- [PHYS 7314 - Quantum Field Theory I](#)
- [PHYS 7315 - Quantum Field Theory II](#)