

Outline of SSE Courses

1. Outline for Master of Science in Space Systems Engineering, M.Sc. (SSE)

Course Title	Credit Hours
Core Courses	
SSE 6101 Space Dynamics and Missions	3
SSE 6103 Space System Design	3
SSE 6205 Spacecraft Structures and Mechanisms	3
SSE 6000 Thesis	18
SSE 6004 Research Methodology and Seminar	Non credit
Total	27
Optional (Any 3)	
Group 1: Departmental Course (Choose 2)	
SSE 6121 Advanced Engineering Mathematics	3
SSE 6123 Hypersonic & High Temperature Gas Dynamics	3
SSE 6125 Rarefied Gas Dynamics	3
SSE 6229 Launch Vehicles and Propulsion	3
SSE 6100 Selected Course in Space System Engineering	3
Group 2: Non-departmental Course (Choose 1)	
SCN 6101 Satellite Communications - 1	3
SCN 6203 Satellite Communications - 2	3
SCN 6121 Satellite Remote Sensing	3
SCN 6123 Antennas and Propagation	3
SCN 6125 RF Systems and Circuit Design	3
SCN 6127 Space Environment and Protection	3
SCN 6129 Principles of Telecom and Packet Networks	3
SCN 6131 Advanced Guidance, Navigation and Control	3
SCN 6231 Space Avionics	3
SCN 6233 Ground Systems and Mission Design	3
Total	9
Grand Total	36

2. Outline for Master of Engineering in Space Systems Engineering, M. Engg. (SSE)

Course Title	Credit Hours
Core Courses	
SSE 6101 Space Dynamics and Missions	3
SSE 6103 Space System Design	3
SSE 6205 Spacecraft Structures and Mechanisms	3
SSE 6002 Project	6
SSE 6004 Research Methodology and Seminar	Non credit
Total	15
Optional (Any 7)	
Group 1: Departmental Course (Choose 4)	
SSE 6121 Advanced Engineering Mathematics	3
SSE 6123 Hypersonic & High Temperature Gas Dynamics	3
SSE 6125 Rarefied Gas Dynamics	3
SSE 6229 Launch Vehicles and Propulsion	3
SSE 6100 Selected Course in Space System Engineering	3
Group 2: Non-departmental Course (Choose 3)	
SCN 6101 Satellite Communications - 1	3
SCN 6203 Satellite Communications - 2	3
SCN 6121 Satellite Remote Sensing	3
SCN 6123 Antennas and Propagation	3
SCN 6125 RF Systems and Circuit Design	3
SCN 6127 Space Environment and Protection	3
SCN 6129 Principles of Telecom and Packet Networks	3
SCN 6131 Advanced Guidance, Navigation and Control	3
SCN 6231 Space Avionics	3
SCN 6233 Ground Systems and Mission Design	3
Total	21
Grand Total	36