Course Requirement Information Side-by-Side with Regular NSE SM

LGO-NSE Program SM	Regular NSE SM
66 units of graduate subjects	66 units of graduate subjects.
36 units approved by the NSE Department (see breakdown below). Undergraduate subjects, English proficiency subjects, and Research subjects (thesis and 22.94) may not be counted.	48 of the 66 units must be taken within the NSE Department (see breakdown below) Undergraduate subjects, English proficiency subjects, and Research subjects (thesis and 22.94) may not be counted.
No special problems (22.901-22.904) may be counted.	No more than 12 units of special problems (22.901-22.904) may be counted.
Two modules are required; 12 units (selected from 22.11, 22.12, 22.13, 22.14, 22.15, 22.16)	Two modules are required; 12 units (selected from 22.11, 22.12, 22.13, 22.14, 22.15, 22.16)
Two specialization courses in NSE are required; 24 units. Recommended Fields of Specializations and subjects to choose from: Nuclear Reactor Engineering: 22.211, 22.312, 22.39, 22.313, 22.251 Nuclear Reactor Physics: 22.211, 22.312, 22.212, 22.213, 22.251 Nuclear Materials: 22.73, 3.20, 22.72, 22.74, 3.21 Fusion: 22.611, 22.62, 22.67, 22.615, 22.616 Nuclear Science and Technology: 22.51, 8.511, 22.90, 8.333, 8.421, 8.422 Nuclear Security and Policy: 6.431, 22.312, 22.90, or other related subjects by petition.	Other subjects may be selected in accordance with the student's particular field of interest. Most Master's candidates specialize in one of four alternative fields: fission nuclear technology, applied plasma physics, nuclear security, or nuclear science and technology. Recommended Subjects for the S.M. Degree (specializations); Nuclear Reactor Engineering: 22.211, 22.312, and one of: (22.39, 22.313, 22.315, or 22.251); Nuclear Reactor Physics: 22.211, 22.312, and one of: (22.212, 22.213, or 22.251); Nuclear Materials: 22.73, 3.20 (Thermodynamics), and one of (22.72, 22.74, or 3.21 (Kinetics));
One additional engineering course of at least 6 units as approved by the NSE Department. 24 units in the required courses in the LGO summer core. The LGO summer <u>courses</u> include focuses on Organizational Leadership and Change, Lean Tools and Applications, Programming in Python, Operations Management, Building and	Fusion: 22.611, 22.62, and one of (22.67, or 22.615); Nuclear Science and Technology: 22.51, 8.511, and one of (22.90, or 8.333); Nuclear Security and Policy: 6.431, 22.814 and one of (22.312, or 22.90)

Leading Effective Teams, Systems Optimization and Analysis, and Probability, Statistics, Data Analytics, and Machine Learning.	
Students apply through the Sloan application	Students apply through the regular MIT grad
system.	apply application system.
There are two rounds of applications.	There is one round of applications.
<u>https://lgo.mit.edu/admissions/application-</u>	<u>https://web.mit.edu/nse/education/grad/ad</u>
<u>directions/</u>	<u>missions.html</u>