## LEADERS FOR GLOBAL OPERATIONS MBA **AND SM IN ENGINEERING**

## **Master of Business Administration** (or Master of Science in Management) and Master of Science in Aeronautics and Astronautics

Leaders for Global Operations (https://catalog.mit.edu/ interdisciplinary/graduate-programs/leaders-global-operations)

#### **MBA** Program Requirements

MBA Coursew	vork <sup>1</sup>	
15.002	Leadership Challenges for an Inclusive World <sup>2</sup>	1
15.010	Economic Analysis for Business Decisions	9
15.280	Communication for Leaders	9
15.311	Organizational Processes	9
15.515	Financial Accounting	9
MBA Core Ele	ctive	9
Select one of	the following subjects:	
15.401	Managerial Finance	
15.814	Marketing Innovation	
15.900	Competitive Strategy	
Leaders for G	lobal Operations Content	
15.086	Engineering Probability	3
15.316	Building and Leading Effective Teams	4
15.317	Leadership and Organizational Change <sup>3</sup>	12
15.761	Introduction to Operations Management <sup>4</sup>	9
15.769	Operations Strategy	9
15.792[J]	Global Operations Leadership Seminar <sup>5</sup>	4
15.794	Research Project in Operations <sup>6</sup>	18
One 3-unit su	bject in lean operations	3
One 3-unit pr	actical leadership subject	3
One 6-unit pl	ant tour and partner integration subject	6
Unrestricted	Electives	
	t 40 units of graduate-level subjects. No ree subjects can be taken in departments anagement. <sup>7</sup>	40
Total Units	-	157

#### **Total Units**

LGO students do not take 15.060 Data, Models, and Decisions in the MBA core.

LGO students must complete Ethics Module only of MBA Core LEAD Requirement.

- 3 Taken during the first summer and final spring for 6 units each, with deliverables during LGO internship on-site period.
- 4 For Operations Research students, this subject is usually approved as an OR Elective.
- 5 This 2-unit subject is taken twice during the program.
- 6 Taken over multiple terms for a total of 18 units.
- 7 Operations Research students must take 15.066[J] System Optimization and Analysis for Operations and 15.087 Engineering Statistics and Data Science as part of their electives.

### SM in Aeronautics and Astronautics Program Requirements LGO Required Engineering Subjects<sup>1</sup>

Total Units		90
Thesis (X.TH	G) <sup>4</sup>	24
Thesis		
chosen in consultation with the advisor		
At least two g	graduate-level engineering subjects,	
Engineering	Electives <sup>3</sup>	21
Astronautics	, chosen with the advisor	
At least two g	graduate courses in Aeronautics and	
Aero/Astro R	equired Subjects <sup>3</sup>	21
One 3-unit su	ubject in Python <sup>2</sup>	
15.087	Engineering Statistics and Data Science	12
15.066[J]	System Optimization and Analysis for Operations	12

- Completion of 15.066[J] and 15.087 fulfill the Aero/Astro Math Requirement for LGO students.
- 2 This subject is taught at the undergraduate level and does not count toward the units required for the degree.
- The number of units for Aero/Astro Required Subjects and for Engineering Electives represent the minimum requirement. Actual units may be higher based on the subjects chosen.
- All LGO students must fulfill the 24#unit minimum dual-degree thesis requirement based on the internship. By incorporating management and engineering content from the respective specialty, students fulfill the thesis requirement for the Master of Business Administration (or Master of Science in Management) and the Master of Science in the engineering specialty. The thesis units are applied to the home department (through which the student applied to LGO) and the thesis subject number registration depends on the student's primary department. Consult the LGO program guide or program officer prior to thesis registration.

## **Master of Business Administration** (or Master of Science in Management) and Master of Science in Chemical Engineering

Leaders for Global Operations (https://catalog.mit.edu/ interdisciplinary/graduate-programs/leaders-global-operations)

#### **MBA** Program Requirements

MBA Coursew	vork <sup>1</sup>	
15.002	Leadership Challenges for an Inclusive World <sup>2</sup>	1
15.010	Economic Analysis for Business Decisions	9
15.280	Communication for Leaders	9
15.311	Organizational Processes	9
15.515	Financial Accounting	9
MBA Core Ele	ctive	9
Select one of	the following subjects:	
15.401	Managerial Finance	
15.814	Marketing Innovation	
15.900	Competitive Strategy	
Leaders for G	lobal Operations Content	
15.086	Engineering Probability	3
15.316	Building and Leading Effective Teams	4
15.317	Leadership and Organizational Change <sup>3</sup>	12
15.761	Introduction to Operations Management <sup>4</sup>	9
15.769	Operations Strategy	9
15.792[J]	Global Operations Leadership Seminar <sup>5</sup>	4
15.794	Research Project in Operations <sup>6</sup>	18
One 3-unit su	bject in lean operations	3
One 3-unit pr	actical leadership subject	3
One 6-unit pl	ant tour and partner integration subject	6
Unrestricted	Electives	
	t 40 units of graduate-level subjects. No ree subjects can be taken in departments anagement. <sup>7</sup>	40
Total Units		157

<sup>1</sup> LGO students do not take 15.060 Data, Models, and Decisions in the MBA core.

<sup>2</sup> LGO students must complete Ethics Module only of MBA Core LEAD Requirement.

<sup>3</sup> Taken during the first summer and final spring for 6 units each, with deliverables during LGO internship on-site period.

- <sup>4</sup> For Operations Research students, this subject is usually approved as an OR Elective.
- <sup>5</sup> This 2-unit subject is taken twice during the program.
- <sup>6</sup> Taken over multiple terms for a total of 18 units.
- <sup>7</sup> Operations Research students must take 15.066[J] System Optimization and Analysis for Operations and 15.087 Engineering Statistics and Data Science as part of their electives.

## SM in Chemical Engineering Program Requirements

LGO Required Engineering Subjects				
15.0	o66[J]	System Optimization and Analysis for Operations	12	
15.0	087	Engineering Statistics and Data Science	12	
One	e 3-unit subje	ect in Python <sup>1</sup>		
Che	emical Engine	eering Required Subjects	21-24	
Sel	ect two of the	e following subjects:		
1	10.34	Numerical Methods Applied to Chemical Engineering		
1	10.40	Chemical Engineering Thermodynamics		
1	10.50	Analysis of Transport Phenomena		
1	10.65	Chemical Reactor Engineering		
Eng	ineering Eleo	ctives <sup>2</sup>	18-21	
		ts in Chemical Engineering, chosen in h the advisor <sup>3</sup>		
The	sis			
The	sis (X.THG) <sup>4</sup>		24	
Tot	al Units		90	
<sup>1</sup> This subject is taught at the undergraduate level and does not count toward the units required for the degree.				
		Engineering Electives units represent the minimum		
2	requirement. Actual units may be higher based on the subjects chosen.			
,	See Chemical Engineering Subjects (https://catalog.init.eau/subjects/10).			
	<sup>4</sup> The thesis fulfills thesis requirements for the Master of Business Administration (or Master of Science in Management) and the Master of Science in the engineering specialty. All LGO students must fulfill the 24#unit minimum thesis requirement based on the internship. The thesis units are applied to the home department (where a student has applied to LGO) and the thesis subject number registration depends on the student's primary department. Consult the LGO program guide or program officer prior to thesis registration.			

## Master of Business Administration (or Master of Science in Management) and Master of Science in Civil and Environmental Engineering

Leaders for Global Operations (https://catalog.mit.edu/ interdisciplinary/graduate-programs/leaders-global-operations)

#### **MBA Program Requirements**

MBA Coursework	( <sup>1</sup>	
15.002	Leadership Challenges for an Inclusive World <sup>2</sup>	1
15.010	Economic Analysis for Business Decisions	9

anizational Processes anizational Processes ancial Accounting awing subjects: magerial Finance rketing Innovation apetitive Strategy berations Content ineering Probability ding and Leading Effective Teams dership and Organizational nge <sup>3</sup> oduction to Operations magement <sup>4</sup>	9 9 <b>9</b> <b>9</b> <b>9</b> <b>3</b> 4 12 9
ancial Accounting wing subjects: hagerial Finance rketing Innovation hpetitive Strategy berations Content ineering Probability Iding and Leading Effective Teams dership and Organizational nge <sup>3</sup> oduction to Operations	9 <b>9</b> 3 4 12
wing subjects: nagerial Finance eketing Innovation npetitive Strategy <b>berations Content</b> ineering Probability dding and Leading Effective Teams dership and Organizational nge <sup>3</sup> oduction to Operations	<b>9</b> 3 4 12
nagerial Finance Reting Innovation Appetitive Strategy Coerations Content Ineering Probability Iding and Leading Effective Teams dership and Organizational ange <sup>3</sup> oduction to Operations	3 4 12
nagerial Finance Reting Innovation Appetitive Strategy Coerations Content Ineering Probability Iding and Leading Effective Teams dership and Organizational ange <sup>3</sup> oduction to Operations	4
keting Innovation petitive Strategy perations Content ineering Probability ding and Leading Effective Teams dership and Organizational nge <sup>3</sup> oduction to Operations	4
npetitive Strategy perations Content ineering Probability Iding and Leading Effective Teams dership and Organizational nge <sup>3</sup> oduction to Operations	4
berations Content ineering Probability Iding and Leading Effective Teams dership and Organizational nge <sup>3</sup> oduction to Operations	4
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lding and Leading Effective Teams dership and Organizational nge <sup>3</sup> oduction to Operations	4
dership and Organizational nge <sup>3</sup> oduction to Operations	12
nge <sup>3</sup> oduction to Operations	
	9
0	
erations Strategy	9
bal Operations Leadership ninar <sup>5</sup>	4
earch Project in Operations <sup>6</sup>	18
lean operations	3
eadership subject	3
and partner integration subject	6
s	
ts of graduate-level subjects. No ects can be taken in departments ent. <sup>7</sup>	40
	157
	bal Operations Leadership hinar <sup>5</sup> earch Project in Operations <sup>6</sup> lean operations eadership subject and partner integration subject <b>s</b> ts of graduate-level subjects. No ects can be taken in departments

- <sup>2</sup> LGO students must complete Ethics Module only of MBA Core LEAD Requirement.
- <sup>3</sup> Taken during the first summer and final spring for 6 units each, with deliverables during LGO internship on-site period.
- <sup>4</sup> For Operations Research students, this subject is usually approved as an OR Elective.
- <sup>5</sup> This 2-unit subject is taken twice during the program.
- <sup>6</sup> Taken over multiple terms for a total of 18 units.

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<sup>7</sup> Operations Research students must take 15.066[J] System Optimization and Analysis for Operations and 15.087 Engineering Statistics and Data Science as part of their electives.

# SM in Civil and Environmental Engineering Program Requirements

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LGO Required Engineering Subjects		
15.066[J]	System Optimization and Analysis for	12
	Operations	
15.087	Engineering Statistics and Data	12
	Science	
One 3-unit subject in Python <sup>1</sup>		

Total Units	90
Thesis (X.THG) <sup>4</sup>	24
Thesis	
Any graduate-level engineering subject(s) <sup>3</sup>	6
Engineering Electives	
Graduate-level subjects in CEE <sup>2</sup>	
Civil and Environmental Engineering Subjects	36

- <sup>1</sup> This subject is taught at the undergraduate level and does not count toward the units required for the degree.
- <sup>2</sup> Chosen CEE subjects (https://catalog.mit.edu/subjects/1) cannot be crosslisted with Management subjects (15.XX) unless approved by the advisor.
- <sup>3</sup> The number of Engineering Electives units represents the minimum requirement. Actual units may be higher based on the subjects chosen.
- <sup>4</sup> All LGO students must fulfill the 24#unit minimum dual-degree thesis requirement based on the internship. By incorporating management and engineering content from the respective specialty, students fulfill the thesis requirement for the Master of Business Administration (or Master of Science in Management) and the Master of Science in the engineering specialty. The thesis units are applied to the home department (through which the student applied to LGO) and the thesis subject number registration depends on the student's primary department. Consult the LGO program guide or program officer prior to thesis registration.

## Master of Business Administration (or Master of Science in Management) and Master of Science in Electrical Engineering and Computer Science

Leaders for Global Operations (https://catalog.mit.edu/ interdisciplinary/graduate-programs/leaders-global-operations)

#### MBA Program Requirements

MBA Coursewo	ork <sup>1</sup>	
15.002	Leadership Challenges for an Inclusive World <sup>2</sup>	1
15.010	Economic Analysis for Business Decisions	9
15.280	Communication for Leaders	9
15.311	Organizational Processes	9
15.515	Financial Accounting	9
MBA Core Elec	tive	9
Select one of t	he following subjects:	
15.401	Managerial Finance	
15.814	Marketing Innovation	
15.900	Competitive Strategy	
Leaders for Global Operations Content		
15.086	Engineering Probability	3
15.316	Building and Leading Effective Teams	4

15.317	Leadership and Organizational Change <sup>3</sup>	12
15.761	Introduction to Operations Management <sup>4</sup>	9
15.769	Operations Strategy	9
15.792[J]	Global Operations Leadership Seminar <sup>5</sup>	4
15.794	Research Project in Operations <sup>6</sup>	18
One 3-unit subject in lean operations		3
One 3-unit practical leadership subject		3
One 6-unit plan	t tour and partner integration subject	6
Unrestricted Electives		
Select at least 40 units of graduate-level subjects. No more than three subjects can be taken in departments other than Management. <sup>7</sup>		40
Total Units		157

<sup>1</sup> LGO students do not take 15.060 Data, Models, and Decisions in the MBA core.

- <sup>2</sup> LGO students must complete Ethics Module only of MBA Core LEAD Requirement.
- <sup>3</sup> Taken during the first summer and final spring for 6 units each, with deliverables during LGO internship on-site period.
- <sup>4</sup> For Operations Research students, this subject is usually approved as an OR Elective.
- <sup>5</sup> This 2-unit subject is taken twice during the program.
- <sup>6</sup> Taken over multiple terms for a total of 18 units.
- <sup>7</sup> Operations Research students must take 15.066[J] System Optimization and Analysis for Operations and 15.087 Engineering Statistics and Data Science as part of their electives.

#### SM in Electrical Engineering and Computer Science Program Requirements

LGO Required Er	ngineering Subjects	
15.066[J]	System Optimization and Analysis for Operations	12
15.087	Engineering Statistics and Data Science	12
One 3-unit subje	ect in Python <sup>1</sup>	
EECS Electives <sup>2</sup>		42
EECS graduate subjects, chosen in consultation with advisor <sup>2, 3</sup>		
Thesis		
Thesis (X.THG) <sup>4</sup>		24
Total Units		90

<sup>1</sup> This subject is taught at the undergraduate level and does not count toward the units required for the degree.

<sup>2</sup> The number of units for EECS Electives (https://catalog.mit.edu/ subjects/6) represent the minimum requirement. Actual units may be higher based on the subjects chosen.

- <sup>3</sup> LGO EECS students fulfill one unit of the Professional Perspective requirement for EECS master's students through 15.794 with research at internship.
- <sup>4</sup> All LGO students must fulfill the 24#unit minimum dual-degree thesis requirement based on the internship. By incorporating management and engineering content from the respective specialty, students fulfill the thesis requirement for the Master of Business Administration (or Master of Science in Management) and the Master of Science in the engineering specialty. The thesis units are applied to the home department (through which the student applied to LGO) and the thesis subject number registration depends on the student's primary department. Consult the LGO program guide or program officer prior to thesis registration.

## Master of Business Administration (or Master of Science in Management) and Master of Science in Mechanical Engineering

Leaders for Global Operations (https://catalog.mit.edu/ interdisciplinary/graduate-programs/leaders-global-operations)

#### MBA Program Requirements

MBA Coursewor	k <sup>1</sup>		
15.002	Leadership Challenges for an Inclusive World <sup>2</sup>	1	
15.010	Economic Analysis for Business Decisions	9	
15.280	Communication for Leaders	9	
15.311	Organizational Processes	9	
15.515	Financial Accounting	9	
MBA Core Electi	ve	9	
Select one of the	e following subjects:		
15.401	Managerial Finance		
15.814	Marketing Innovation		
15.900	Competitive Strategy		
Leaders for Glob	oal Operations Content		
15.086	Engineering Probability	3	
15.316	Building and Leading Effective Teams	4	
15.317	Leadership and Organizational Change <sup>3</sup>	12	
15.761	Introduction to Operations Management <sup>4</sup>	9	
15.769	Operations Strategy	9	
15.792[J]	Global Operations Leadership Seminar <sup>5</sup>	4	
15.794	Research Project in Operations <sup>6</sup>	18	
One 3-unit subject in lean operations		3	
One 3-unit practical leadership subject		3	
One 6-unit plant tour and partner integration subject		6	
Unrestricted Electives			

Select at least 40 units of graduate-level subjects. No	
more than three subjects can be taken in departments	
other than Management. <sup>7</sup>	

40

157

#### **Total Units**

- <sup>1</sup> LGO students do not take 15.060 Data, Models, and Decisions in the MBA core.
- <sup>2</sup> LGO students must complete Ethics Module only of MBA Core LEAD Requirement.
- <sup>3</sup> Taken during the first summer and final spring for 6 units each, with deliverables during LGO internship on-site period.
- <sup>4</sup> For Operations Research students, this subject is usually approved as an OR Elective.
- <sup>5</sup> This 2-unit subject is taken twice during the program.
- <sup>6</sup> Taken over multiple terms for a total of 18 units.
- <sup>7</sup> Operations Research students must take 15.066[J] System Optimization and Analysis for Operations and 15.087 Engineering Statistics and Data Science as part of their electives.

#### SM in Mechanical Engineering Program Requirements

LGO Required E	ngineering Subjects	
15.066[J]	System Optimization and Analysis for Operations	12
15.087	Engineering Statistics and Data Science	12
One 3-unit subje	ect in Python <sup>1</sup>	
Mechanical Eng	ineering Required Subjects	
Three 12-unit gr Engineering <sup>2, 3</sup>	aduate subjects in Mechanical	36
<b>Engineering Ele</b>	ctives	12
Any graduate er	ngineering subject <sup>3</sup>	
Thesis		
Thesis (X.THG) <sup>4</sup>	•	24
Total Units		96

<sup>1</sup> This subject is taught at the undergraduate level and does not count toward the units required for the degree.

- <sup>2</sup> Chosen Mechanical Engineering subjects (https://catalog.mit.edu/ subjects/2) cannot be cross-listed with Management subjects (15.XX) unless approved by the advisor.
- <sup>3</sup> Subject(s) must be chosen in consultation with advisor.
- <sup>4</sup> All LGO students must fulfill the 24#unit minimum dual-degree thesis requirement based on the internship. By incorporating management and engineering content from the respective specialty, students fulfill the thesis requirement for the Master of Business Administration (or Master of Science in Management) and the Master of Science in the engineering specialty. The thesis units are applied to the home department (through which the student applied to LGO) and the thesis subject number registration depends on the student's primary department. Consult the LGO program guide or program officer prior to thesis registration.

## Master of Business Administration (or Master of Science in Management) and Master of Science in Nuclear Science and Engineering

Leaders for Global Operations (https://catalog.mit.edu/ interdisciplinary/graduate-programs/leaders-global-operations)

MBA Coursev	vork <sup>1</sup>	
15.002	Leadership Challenges for an Inclusive World <sup>2</sup>	1
15.010	Economic Analysis for Business Decisions	ç
15.280	Communication for Leaders	9
15.311	Organizational Processes	9
15.515	Financial Accounting	9
MBA Core Ele	ctive	9
Select one of	the following subjects:	
15.401	Managerial Finance	
15.814	Marketing Innovation	
15.900	Competitive Strategy	
Leaders for G	lobal Operations Content	
15.086	Engineering Probability	3
15.316	Building and Leading Effective Teams	4
15.317	Leadership and Organizational Change <sup>3</sup>	12
15.761	Introduction to Operations Management <sup>4</sup>	9
15.769	Operations Strategy	9
15.792[J]	Global Operations Leadership Seminar <sup>5</sup>	4
15.794	Research Project in Operations <sup>6</sup>	18
One 3-unit su	bject in lean operations	3
One 3-unit pr	actical leadership subject	3
One 6-unit pl	ant tour and partner integration subject	6
Unrestricted	Electives	
	t 40 units of graduate-level subjects. No ree subjects can be taken in departments anagement. <sup>7</sup>	40
Total Units		157

- LGO students do not take 15.060 Data, Models, and Decisions in the MBA core.
- <sup>2</sup> LGO students must complete Ethics Module only of MBA Core LEAD Requirement.
- <sup>3</sup> Taken during the first summer and final spring for 6 units each, with deliverables during LGO internship on-site period.
- <sup>4</sup> For Operations Research students, this subject is usually approved as an OR Elective.

- <sup>5</sup> This 2-unit subject is taken twice during the program.
- <sup>6</sup> Taken over multiple terms for a total of 18 units.
- <sup>7</sup> Operations Research students must take 15.066[J] System Optimization and Analysis for Operations and 15.087 Engineering Statistics and Data Science as part of their electives.

LGO Require	d Engineering Subjects	
15.066[J]	System Optimization and Analysis for Operations	12
15.087	Engineering Statistics and Data Science	12
One 3-unit su	ubject in Python <sup>1</sup>	
NSE Require	d Subjects	
Two specializ	zed subjects in NSE <sup>2</sup>	24
Select two of	the following subjects:	12
22.11	Applied Nuclear Physics	
22.12	Radiation Interactions, Control, and Measurement	
22.13	Nuclear Energy Systems	
22.14	Materials in Nuclear Engineering	
22.15	Essential Numerical Methods	
22.16	Nuclear Technology and Society	
Engineering	Electives	
Any graduate subject in engineering <sup>3, 4</sup>		6
Thesis		
Thesis (X.TH	G) <sup>5</sup>	24
Total Units		90

- <sup>1</sup> This subject is taught at the undergraduate level and does not count toward the units required for the degree.
- <sup>2</sup> Recommended fields of specialization include nuclear reactor engineering, nuclear reactor physics, nuclear materials, fusion, nuclear security policy, and nuclear science and technology.
- <sup>3</sup> The number of units for Engineering Electives represents the minimum requirement. Actual units may be higher based on the subjects chosen.
- <sup>4</sup> Consult department for restrictions.

All LGO students must fulfill the 24#unit minimum dual-degree thesis requirement based on the internship. By incorporating management and engineering content from the respective specialty, students fulfill the thesis requirement for the Master of Business Administration (or Master of Science in Management) and the Master of Science in the engineering specialty. The thesis units are applied to the home department (through which the student applied to LGO) and the thesis subject number registration depends on the student's primary department. Consult the LGO program guide or program officer prior to thesis registration.

## Master of Business Administration (or Master of Science in Management) and Master of Science in Operations Research

Leaders for Global Operations (https://catalog.mit.edu/ interdisciplinary/graduate-programs/leaders-global-operations)

Leadership Challenges for an Inclusive World <sup>2</sup>	1
Economic Analysis for Business Decisions	ç
Communication for Leaders	9
Organizational Processes	9
Financial Accounting	9
tive	9
he following subjects:	
Managerial Finance	
Marketing Innovation	
Competitive Strategy	
obal Operations Content	
Engineering Probability	3
Building and Leading Effective Teams	4
Leadership and Organizational Change <sup>3</sup>	12
Introduction to Operations Management <sup>4</sup>	9
Operations Strategy	9
Global Operations Leadership Seminar <sup>5</sup>	4
Research Project in Operations <sup>6</sup>	18
pject in lean operations	3
ctical leadership subject	3
nt tour and partner integration subject	6
lectives	
40 units of graduate-level subjects. No ee subjects can be taken in departments nagement. <sup>7</sup>	40
	Inclusive World 2Economic Analysis for Business DecisionsCommunication for LeadersOrganizational ProcessesFinancial Accountingttivethe following subjects: Managerial FinanceManagerial FinanceMarketing Innovation Competitive Strategytobal Operations ContentEngineering ProbabilityBuilding and Leading Effective TeamsLeadership and Organizational Change 3Introduction to Operations Management 4Operations StrategyGlobal Operations Leadership Seminar 5Research Project in Operations 6opect in lean operations cuical leadership subjectnt tour and partner integration subject40 units of graduate-level subjects. No ee subjects can be taken in departments

- <sup>1</sup> LGO students do not take 15.060 Data, Models, and Decisions in the MBA core.
- <sup>2</sup> LGO students must complete Ethics Module only of MBA Core LEAD Requirement.
- <sup>3</sup> Taken during the first summer and final spring for 6 units each, with deliverables during LGO internship on-site period.
- <sup>4</sup> For Operations Research students, this subject is usually approved as an OR Elective.

- <sup>5</sup> This 2-unit subject is taken twice during the program.
- <sup>6</sup> Taken over multiple terms for a total of 18 units.
- <sup>7</sup> Operations Research students must take 15.066[J] System Optimization and Analysis for Operations and 15.087 Engineering Statistics and Data Science as part of their electives.

#### SM in Operations Research Program Requirements

<b>Operations Res</b>	earch Required Subjects	
15.095	Machine Learning Under a Modern Optimization Lens <sup>1</sup>	12
6.3702	Introduction to Probability	12
or 6.7700[J]	Fundamentals of Probability	
15.C57[J]	Optimization Methods	12
or 6.7210[J]	Introduction to Mathematical Programming	
<b>Operations Res</b>	earch Electives <sup>2</sup>	30
Four OR-focused consultation wit	l graduate subjects, chosen in th advisor	
Thesis		
Thesis (X.THG) <sup>3</sup>	3-	24
Total Units		90

<sup>1</sup> This subject can be substituted with another suitable statistics subject (e.g., 6.7900 Machine Learning, 6.7910[J] Statistical Learning Theory and Applications, 14.382 Econometrics) with approval of advisor.

- <sup>2</sup> The number of units for Operations Research Electives represents the minimum requirement. Actual units may be higher based on the subjects chosen. Generally includes 15.761 of the LGO required curriculum.
- <sup>3</sup> All LGO students must fulfill the 24#unit minimum dual-degree thesis requirement based on the internship. By incorporating management and engineering content from the respective specialty, students fulfill the thesis requirement for the Master of Business Administration (or Master of Science in Management) and the Master of Science in the engineering specialty. The thesis units are applied to the home department (through which the student applied to LGO) and the thesis subject number registration depends on the student's primary department. Consult the LGO program guide or program officer prior to thesis registration.