

Global Scientists and Engineers Course – Advanced

Entry requirements and Completion Requirements/Designated Courses

Entry requirements:

- 1) A graduate of Tokyo Tech who successfully completed the previous GSEC (before March2017) or current GSEC – Intermediate
- 2) A graduate of another university who has acquired basic global competencies and achieved the minimum test score or fulfilled the requirements of one of the following:

TOEFL iBT: 80 points, **TOEFL ITP:** 550 points, **TOEIC:** 750 points, **IELTS:** 6.0 points, **EIKEN:** Grade Pre-1

The Application Form must be submitted along with a photocopy of the Official Score Report of one of the above-mentioned tests and the following:

- documentation (certificates, etc.) proving that the applicant has the same level of global competencies as those who have completed GSEC – Intermediate
- an essay describing how the applicant possesses the global competencies necessary to enroll in GSEC – Advanced

The screening results will be notified via email after applications and necessary documents have been reviewed.

GSEC – Advanced aims to provide education, including study abroad programs, that enables students to develop the following:

- (1) international liberal arts
Broadly understand the connections between society and one's area of specialization, know the relevant ethics, history, and culture, and utilize this understanding in cross-cultural communication.
- (2) Global leadership
Clearly articulate concrete goals to others of a different culture, propose various ideas without fearing risk, recruit supporters, and achieve objectives.
- (3) Skills to bring new ideas and values
Begin new activities based on novel ideas without being constrained by conventional thinking.
- (4) Basic skills to conduct international joint research
Conduct research and propose ideas in collaboration with experts from Japan and abroad who work outside of one's area of specialization.

Students must attain 4 credits from the courses on the completion requirements list (A1 and A2), and study abroad experience (A3).

GSEC acknowledges the acquisition of international experience as one of Tokyo Tech's key goals in education. After fulfilling the completion of GSEC – Intermediate, students will have gained the following through international experience:

- a broader perspective
- an appreciation of diversity and collaboration with people from other countries
- improved communication skills in foreign languages

	Course equivalent to study abroad experience	Course category	Course number	Course title	Credits	Offered quarter	International liberal arts	Global leadership	Skills to bring new ideas and values	Basic skills to conduct international joint research	Required credits	Comments
A1	Global Leadership and International Liberal Arts	Global Awareness and Other Breadth Courses	LAW.X421	Global Leadership Training / Breadth courses *	0-0-1	4Q		○			A minimum of 1 credit	If more than 2 credits are attained, the extra credits can be counted as part of the 3 credits required under Liberal Arts, Foreign Languages, and Career Development. *Credits acquired from a course equivalent to "Study Abroad Experience" cannot be double counted in this category.
			LAW.X423	Technology and Product in Context	0-1-0	4Q	○					
			LAW.X425	Global Leadership Practice	0-1-0	2Q		○				
			LAW.X427	Our Sustainable Energy Future: Role of Business and Technology (Previously:Our Climate Future)	0.5-0.5-0	3Q	○	○	○			
			LAW.X429	Multicultural Collaboration and Leadership	0-1-0	4Q		○				
A2	Liberal Arts, Foreign Languages, and Career Development	Breadth Courses (Global Awareness and Other Breadth Courses)	LAW.X406	Fieldwork Skills Spring	0-1-0	3Q	○		○		A minimum of 3 credits	Credits acquired from a course equivalent to "Study Abroad Experience" cannot be double counted in this category. If courses listed on the left are taken as "Study Abroad Experience," acquired credits will not be accepted toward the required 3 credits for "Liberal Arts, Foreign Languages, and Career Development."
			LAW.X407	Fieldwork Skills Fall	0-1-0	1Q	○		○			
			LAW.X408	Think Aloud	1-1-0	4Q		○	○	○		
			LAW.X417	Sustainable Engineering Technology	2-0-0	3Q	○		○			
			LAW.X414	Technical Management for Sustainable Engineering	0-2-0	3Q-4Q	○					
			LAW.X428	Resource Efficiency and Circular Economy	0-2-0	4Q	○		○	○		
			LAW.X440	Advanced Course of Traditional Technology and Intercultural Co-learning	0.5-0.5-0	2Q	○		○	○		
			LAW.X515 - 6	Advanced Domestic Training for Global Scientists and Engineers 1C - D	0-0-1	1-2Q - 3-4Q			○	○		
			LAW.X403	Introduction to EdTech: Video-Making (Closed from AY2020)	0-1-0	2Q			○			
			LAH.C402	Peer Review Practicum 1-4 [Prerequisites]completed "Leadership Dojo"	0-1-0	3Q - 4Q			○			
			LAH.C401	Leadership Dojo 1-12	1-0-0	1Q - 2Q			○			
			LAH.A501	Area Studies: Europe	1-0-0	1Q	○					
		LAH.A503	Area Studies: Latin America	1-0-0	2Q	○						
		LAH.A504	Area Studies: Middle East and Africa	1-0-0	3Q	○						
		LAH.A506	Area Studies: North America and Oceania	1-0-0	4Q	○						
		LAH.A505	Area Studies: South and Southeast Asia	1-0-0	3Q	○						
		LAH.A502	Area Studies: East Asia	1-0-0	1Q	○						
		LAH.A511	Interpretation of Japan	1-0-0	3Q	○						
		LAH.C501	Advanced Leadership Workshop 1-2 [Prerequisites]completed "Leadership Dojo" and "Peer Review Practicum"	1-0-0	1Q	○		○				
		LAC.M531	Pre ALP Practice A-D (former : MLP Practice)	1-0-0	1Q-4Q				○			
		LAC.M521	Ethics of Scientists (Master Course) C-D	1-0-0	3Q - 4Q	○		○				
		LAC.M525	Ethics of Engineers (Master Course) C-D	1-0-0	3Q - 4Q	○		○				
		LAC.M537	Social Contributions through Research C1-2	1-0-0	3Q	○		○	○			
		LAC.M443	Master's Developing Career Adaptability for Global Competitiveness	1-0-0	3Q				○			
		LAC.M403	Strategies for Balancing Career, Personality and Lifestyle(Master Course) (former : Master's Career Design III)	1-0-0	2Q - 4Q				○			
		LAC.M406	Master's Global Career Development Literacy	1-0-0	2Q	○			○			
		LAC.M511	Smart Business Career development (Master's Developing Career Adaptability for Global Competitiveness)	1-0-0	3Q				○			
		LAC.M448	Master's Critical Thinking	1-0-0	3Q				○			
		LAC.M533	Outline of Technology Management A	1-0-0	1Q	○		○	○			
		LAC.M562	Master's Scientific Communication	1-0-0	2Q	○		○				
		LAC.M451	Master's Technical Discussion A-B	0-1-0	1Q - 2Q				○			
		LAC.M457	Master's Technical Writing C-D	0-1-0	3Q - 4Q				○			
		LAC.A645	Outline of Technology Management A	1-0-0	2Q	○			○			
		LAC.C643	Developing Career Adaptability for Global Competitiveness	1-0-0	3Q				○			
		LAC.A635	ALP Practice II (Overseas Training)	0-0-1	1Q-4Q				○			
		LAC.C648	Critical Thinking	1-0-0	3Q				○			
		LAC.C651	Technical Discussion	0-1-0	1Q - 2Q	○						
		LAC.C657	Technical Writing	0-1-0	3Q - 4Q	○			○			
		LAC.C621	Ethics of Scientists and Engineers D	1-0-0	4Q	○		○				
		LAE.E401	Study Abroad Program in English IIIA 1 - 2	0-2-0	1Q-4Q	○						
		LAE.E402	Study Abroad Program in English IIIB 1 - 2	0-2-0	1Q-4Q	○						
		LAE.E451	TOEFL Seminar 13	0-1-0	1Q	○						
		LAE.E452	TOEFL Seminar 14	0-1-0	2Q	○						
		LAE.E453	TOEFL Seminar 15	0-1-0	3Q	○						
		LAE.E454	TOEFL Seminar 16	0-1-0	4Q	○						
LAE.E441	Academic Presentation in English 13	0-1-0	1Q	○								
LAE.E442	Academic Presentation in English 14	0-1-0	2Q	○								
LAE.E443	Academic Presentation in English 15	0-1-0	3Q	○								
LAE.E444	Academic Presentation in English 16	0-1-0	4Q	○								
LAE.E461	Academic Writing in English 13	0-1-0	1Q	○								
LAE.E462	Academic Writing in English 14	0-1-0	2Q	○								
LAE.E463	Academic Writing in English 15	0-1-0	3Q	○								
LAE.E464	Academic Writing in English 16	0-1-0	4Q	○								
LAE.E431	Oral Expression in English 13	0-1-0	1Q	○								
LAE.E432	Oral Expression in English 14	0-1-0	2Q	○								
LAE.E433	Oral Expression in English 15	0-1-0	3Q	○								
LAE.E434	Oral Expression in English 16	0-1-0	4Q	○								
LAE.E471	English Speech Seminar 13	0-1-0	1Q	○								
LAE.E472	English Speech Seminar 14	0-1-0	2Q	○								
LAE.E435	Oral Expression in English GIII	0-2-0	2Q	○								
LAE.E436	Oral Expression in English GIV	0-2-0	4Q	○								
LAE.E481	English Language and Cultures 13	0-1-0	1Q	○								
LAE.E482	English Language and Cultures 14	0-1-0	2Q	○								
LAE.E483	English Language and Cultures 15	0-1-0	3Q	○								
LAE.E484	English Language and Cultures 16	0-1-0	4Q	○								
LAL.G431	German Seminar: Culture and Society 1	0-1-0	1Q	○								
LAL.G432	German Seminar: Culture and Society 2	0-1-0	2Q	○								
LAL.G433	German Seminar: Culture and Society 3	0-1-0	3Q	○								
LAL.G434	German Seminar: Culture and Society 4	0-1-0	4Q	○								
LAL.F431	French Seminar: Culture and Society 1	0-1-0	1Q	○								
LAL.F432	French Seminar: Culture and Society 2	0-1-0	2Q	○								
LAL.F433	French Seminar: Culture and Society 3	0-1-0	3Q	○								
LAL.F434	French Seminar: Culture and Society 4	0-1-0	4Q	○								
LAL.R431	Russian Seminar: Culture and Society 1	0-1-0	1Q	○								
LAL.R432	Russian Seminar: Culture and Society 2	0-1-0	2Q	○								
LAL.R433	Russian Seminar: Culture and Society 3	0-1-0	3Q	○								
LAL.R434	Russian Seminar: Culture and Society 4	0-1-0	4Q	○								
LAL.C431	Chinese Seminar: Culture and Society 1	0-1-0	1Q	○								
LAL.C432	Chinese Seminar: Culture and Society 2	0-1-0	2Q	○								
LAL.C433	Chinese Seminar: Culture and Society 3	0-1-0	3Q	○								
LAL.C434	Chinese Seminar: Culture and Society 4	0-2-0	1Q-4Q	○								
LAL.S431	Spanish Seminar: Culture and Society 1	0-1-0	1Q	○								
LAL.S432	Spanish Seminar: Culture and Society 2	0-1-0	2Q	○								
LAL.S433	Spanish Seminar: Culture and Society 3	0-1-0	3Q	○								
LAL.S434	Spanish Seminar: Culture and Society 4	0-1-0	4Q	○								
LAL.Z401	Study Abroad Program in Second Foreign Languages IIIA 1 - 2	0-2-0	1Q-4Q	○								
LAL.Z402	Study Abroad Program in Second Foreign Languages IIIB 1 - 2	0-2-0	1Q-4Q	○								
TAL.C.401	Global Presentation A, B, C, D	1-0-0	1Q - 3Q	○			○					
TAL.C.402	Global Communication A, B, C, G, F	1-0-0	2Q - 4Q	○								
TAL.C.501	Global Writing A, B, C, D	1-0-0	1Q - 3Q - 4Q	○								
TAL.C.601	Strategic Debate A, B	1-0-0	1Q - 3Q	○								
TAL.C.602	Creative Discussion A, B	1-0-0	2Q - 3Q	○								
												Closed since AY2020
												Closed since AY2020

	Period of study abroad	Necessary experience and required credits	International liberal arts	Global leadership	Skills to bring new ideas and values	Basic skills to conduct international	Minimum period of study abroad (study days)	Comments		
A3	Study Abroad Experience	Study abroad for at least 8 consecutive weeks (minimum 40 study days)			○	○	At least 4 consecutive weeks of study abroad (minimum 20 study days)	Students must be recognized to possess international experience necessary to acquire GSEC – Advanced skills. Their study abroad experiences must satisfy requirements for course completion. To receive this recognition, student must submit a request with academic transcripts (including the number of credits and additional course credits from one of the following: (a) Global Awareness and Other Breadth Courses3 or graduate major courses (b) foreign language courses4 (c) an overseas university from another study abroad program) obtained from the study abroad program to the Support Office for the Promotion of Global Human Resource Development within one month upon return.		
		Study abroad for at least 6 consecutive weeks (minimum 30 study days) and one of the conditions in the right column must be	1. Acquire one credit from among the courses designated as equivalent to study abroad experience (marked with circles in English Language Courses)			○		○	When appropriate credit(s) from Graduate Major Courses, and Foreign Language Courses is not gained, "Advanced Overseas Training for Global Scientists and Engineers 1C,D to 4C,D" (LAW.X507-514) * can be registered with "Study Abroad Experience".	
		Study abroad for at least 2 consecutive weeks*2 (separate from the 6-week trip)	2. Study abroad for at least 2 consecutive weeks*2 (separate from the 6-week trip)					○	○	Presentations at international conferences must be recognized as having satisfied completion requirements. To receive this recognition, student should submit a copy of the following documents: (i) A cover of the conference program containing information such as conference title, objectives, venue and period (ii) Page(s) of the conference program showing the applicant's presenter's name, presentation title, and abstract (iii) The applicant's abstract or the first page of the paper submitted to the conference *No period required
		Study abroad for at least 4 consecutive weeks*1 (minimum 20 study days) and one of the conditions in the right column must be	1. Acquire two credits from among the courses designated as equivalent to study abroad experience (marked with circles in English Language Courses)					○	○	*1 A study abroad period of less than four consecutive weeks, including 20 study days, may fulfill requirements for study abroad experience, on the condition that it has produced satisfactory results. Students to whom this applies should consult the Support Office for the Promotion of Global Human Resource Development.
		Study abroad for at least 2 consecutive weeks*2 (separate from the 4-week trip) or present at an international conference*	2. Acquire one credit from among the courses designated as equivalent to study abroad experience, and study abroad for at least 2 consecutive weeks*2 (separate from the 4-week trip) or present at an international conference*					○	○	*2 Study abroad for at least 10 consecutive days (minimum 8 study days) plus pre- and post-study
	Study abroad for at least 4 consecutive weeks (separate from the 4-week trip)				○	○				

Notes:

- The courses designated for GSEC will be added and updated.
- Students should register for courses in such a way to acquire (a) international liberal arts, (b) international leadership, (c) skills to bring new ideas and values, and (d) basic skills for conducting international joint research.
- Students will be assessed on the competencies recorded in their learning portfolios and will undergo interviews in order to fulfill the completion requirements. Those who have been admitted will receive the Certificate of Completion upon finishing a master's program.