

Overview of Entrepreneurship Courses (Common Use)

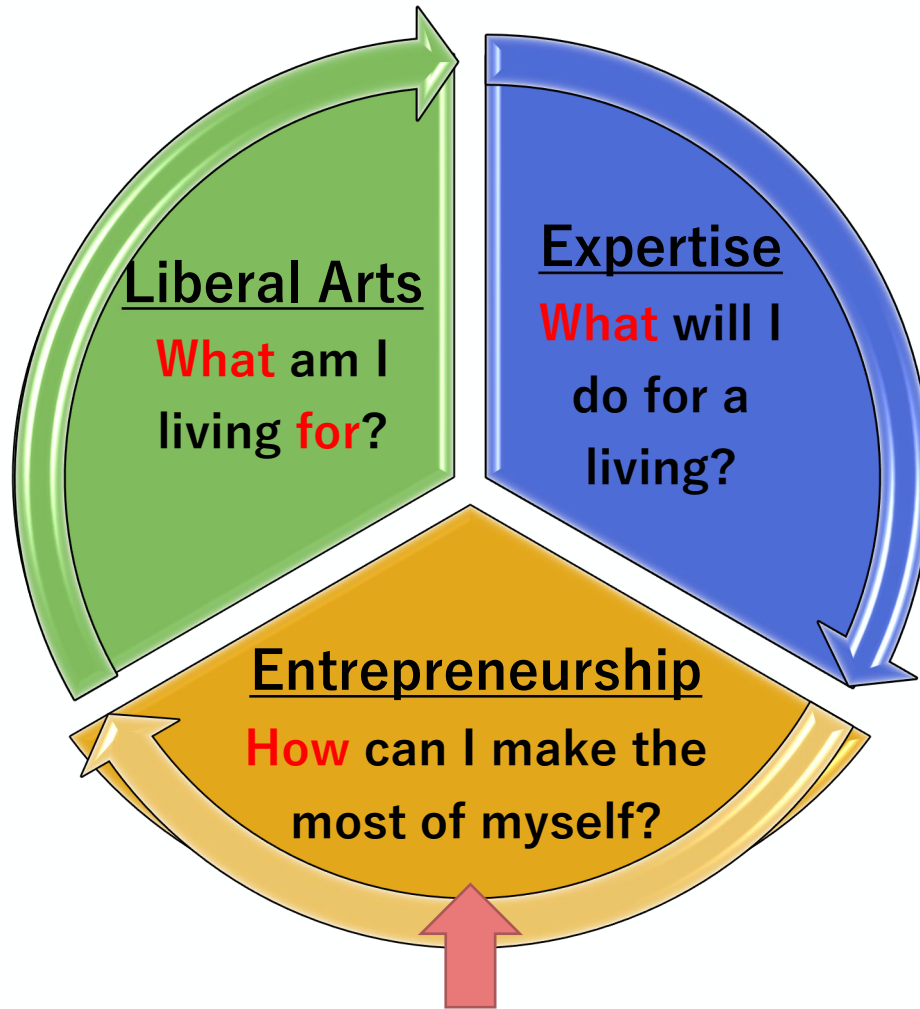
Inspiring futures

Center for Entrepreneurship Education



PR Video

Three pillars in Education of Science Tokyo



Science Tokyo aims to develop human resources working for diverse organizations such as not only start-ups but also companies, universities, government agencies, international organisations, NGOs/NPOs, etc. who can solve global issues raised by the SDGs, etc. by creating new value, and can create future societies by utilising their comprehensive knowledge.

**Foresight • Global Competencies •
Leadership • Value Creation •
Career Development**



Entrepreneurship Courses

Science Tokyo will implement entrepreneurship education for all students in all degree programs (B, M and D).

Curriculum Models:

- Entrepreneurship Education Core
(B: Strongly recommended, **M**/D: Required)
- Global Education Option
(B/**M**: Optional)
- Entrepreneurship Education Plus
(D: Optional)



Entrepreneurship is like an operating system in computers. It is a system of behaviour (mindset and skills) necessary for all students' future career path to be acquired.

Competencies, Knowledge and Skills to be Acquired

(1) Foresight

Have a clear vision of a better future for society based on scientific and technological developments

(2) Global Competencies

By understanding the essence of global issues and their relationship with oneself, and through collecting, analysing and elucidating, one should be able to make proposal for solution. Further, one shall be able to equip with collaborative skills with one(s) with different background (culture, custom, and language, etc.) based on respect and mutual understanding.

(3) Leadership

Demonstrate leadership in building consensus among different stakeholders by recognizing hidden assumptions, respecting diversity and expressing opinions based on their own values.





Competencies, Knowledge and Skills (Cont.)

(4) Value Creation

Based on insights into essential issues in their own area of expertise, they **create new value by repeatedly proposing solutions, implementing them and verifying them** from multiple perspectives.

They also increase the probability of the process, bring it to fruition in the real world and **achieve it with a sense of purpose.**

(5) Career Development

Find role models as references for their future and develop their future careers. Basic knowledge required for success in society, including industry and company analysis, organizational financial accounting, laws, standards and other regulations, entrepreneurship, ethics and SGDs.

Social skills such as self-understanding and self-presentation, communication, critical thinking, writing, problem-solving and leadership will be obtained..

● CEE provides entrepreneurship courses on components (1) to (5) **at the 100 - 600 levels**. It is recommended that students take these courses **across as many components as possible.**

● Also available are expertise courses provided by each school that can be regarded as entrepreneurship courses.

● Please check the 'Study Guide' for details.

Entrepreneurship Courses for Graduate Students (Required)

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① Entrepreneurship Education Core (Master)

It is required for the master to obtain at least 2 credits to fulfil the following two GAs (GA0M and GA1M) set out in Table M-1 in the 'Study Guide'.

(※) Courses without a GA code cannot be counted towards the Education Core credits.)

Table M-1 Graduate Attributes

GA0M	You can clearly plan your own career and recognize the abilities necessary for realizing it while considering ethics and relevance to societal problems.
GA1M	You can acquire the knowledge, skills, and ethics necessary for realizing your planned career and contribute to societal problem-solving while collaborating with other experts

Note Credits for one course cannot be double-counted for both expertise course and entrepreneurship course.

Examples of Courses for Master's Program 1

Table M- 2 Entrepreneurship courses provided by CEE (Excerpt.)

Elements	Level	Code	Course Title	Credit	Quarter	
Global	400	ENT.G405	異文化グループワーク海外研修アドバンスト 2 (Advanced Multicultural Groupwork Study Abroad 2)	0-0-2	1~2Q/3~4Q	英日併用 GA1M
	400	ENT.G453	Technology and Product in Context (物語のあるものづくり)	0-1-0	4Q	英語 GA1M
	400	ENT.G454	Our Sustainable Energy Future: Role of Business and Technology (私たちの持続可能なエネルギーの未来: ビジネスと技術の役割)	0.5- 0.5-0	3Q	英語 GA1M
Leader ship	400	ENT.L456	Effective Teamwork in Global Companies (グローバル企業の効果的なチームワーク)	0-1-0	4Q	英語 GA1M
	400	ENT.L457	Global Leadership Practice (グローバルリーダーシップ実践)	0-2-0	2Q	英語 GA1M
Value Creation	400	ENT.V401	Master's Introduction to Entrepreneurship 1 (修士アントレプレナーシップ入門 1)	1-0-0	3Q	英語 GA0M
	400	ENT.V402	Master's Introduction to Entrepreneurship 2 (修士アントレプレナーシップ入門 2)	1-0-0	4Q	英語 GA1M
Career Development	GA: Knowledge and skills to be acquired				Q/3Q	GA0M
	400	ENT.C406	Master's Global Career Development Literacy (修士グローバルキャリア開発リテラシー)	1-0-0	1Q/3Q	英語 GA0M

GA1M



GA0M



Examples of Courses for Master's Program 2

**Table M-3 Entrepreneurship-deemed courses provided institute-wide
(Excerpt.)**

Elements	Level	Code	Course Title	Credit	Quarter		
Global	400	LAW.X416	Modern Japan (モダンジャパン)	1-1-0	2Q	広域教 養科目	英語 GA0M GA1M
Value Creation	400	LAW.X418	Study on Japanese Companies and Industries I (日本企業・産業研究 I)	0-1-0	3Q	広域教 養科目	英語 GA0M GA1M
	400	LAW.X419	Study on Japanese Companies and Industries II (日本企業・産業研究 II)	0-1-0	1Q	広域教 養科目	英語 GA0M GA1M

GA0M
GA1M



GA: Knowledge and skills to be acquired



Examples of Courses for Master's Program 3

- Each school provides expertise courses that can be regarded as entrepreneurship courses.
- GA has been recognized.

Please check the 'Study Guide' for details.

Table ○ Courses that can be regarded as entrepreneurship courses
for ●● Master's Program
Entrepreneurship-deemed Courses offered by each School
(Including information about GA)

Note Credits for one course cannot be double-counted for both expertise course and entrepreneurship course.

② Global Education Option (Master) 1

In addition to the required GA-awarded courses in the Entrepreneurship Education Core (Master's program), **this option also offers courses for studying abroad and improving foreign language communication skills.**

- This option can be undertaken in parallel with the Entrepreneurship Education Core.
- **A certificate of completion for the Global Education Option (Master's Program) will be issued** if, by the end of the Master's Program, **a minimum of five credits have been obtained** to meet the following conditions on next page, **in addition to the two credits that fulfil the GA required in the Education Core.**



② Global Education Option (Master) 2

Option Prerequisites:

- 2 credits in the Education Core are required.
- At least 1 credit from the courses of “Global Competencies” and “Leadership” in the entrepreneurship courses designated in the ‘Option’.
- At least 1 credit from the courses designated by the institute for the recognition of international experience. (Studying abroad for at least 1 month is recommended.)
- At least 1 credit from the communication courses (or the entrepreneurship courses designated by the ‘Option’ in Tables M-2 and M-3)
- A total of 5 or more credits are required. (courses may not overlap)
- No English proficiency test scores (such as TOEFL iBT) are required



Summary of Curriculum Models (Important)

Elements	Master	
	Core (Required)	Global Education Option
Global Competencies	2 (GA0M and GA1M)	3 ↑ From courses specified by 'Option'
Leadership		
Value Creation		
Career Development		
Total Credits	2	2+3



Certificate for Option



- Only course registration is required for each model.
(no application or no other procedure is necessary)

How to check credits and GA for entrepreneurship courses in the “Web Services for Students and Faculty”

【Web Services for Students and Faculty” for each student】

修了要件 <物理学コース>

		修了		
教養科目群		2	2	
文系教養科目 (400番台)		2	2	
文系教養科目 (500番台)		1	1	
アントレプレナーシップ科目 (GA付)		2	1	
アントレプレナーシップ科目 (GAなし) (注)			0	
教養科目群 (小計) <A>		5	4	0
専門科目群		4	4	
講究科目		4	4	
研究関連科目 (R)		2	2	
研究関連科目 (B)		8	8	
コース標準学修課程 専門科目 (L)			1	
コース標準学修課程の専門科目群 (小計) 		23	2	
コース標準学修課程外の専門科目 <C>			0	
合計 <A+B+C>		30	33	2

No. of credits obtained for Entrepreneurship Courses(a)

Make sure that $a + b \geq 2$

No. of credits obtained courses that can be regarded as entrepreneurship courses(b)

(注) GAなしの科目は、「アントレプレナーシップ科目」の修了要件2単位に含めることはできません。

※「修得済単位」には学生自身が修得した単位数が計上されておりますが、コースでの読み替えを行う前の区分で掲載されております。

※ 合計単位数の要件を満たしていますが、読み替えをすることで単位が不足する可能性があります。

要件を満たさない項目(テストサイトのみ表示)：キャリア/アントレ科目、教養科目

修得済GA

GA0M, GA1M

修了には、入学年度の学修案内に記載のとおり

【修士課程】
2022年度
2021年度

GAs in entrepreneurship courses acquired so far: both 'GA0M' and 'GA1M' must be displayed here by the end of the master program. GAs acquired in entrepreneurship-deemed courses offered in each expertise course, etc., are also indicated here.

Note: Credits for one course cannot be double-counted for both expertise course and entrepreneurship course.



③ Entrepreneurship Education Core (Doctoral)

It is required for doctoral students to obtain at least 4 credits to fulfil the following two GAs (GA0D and GA1D) set out in Table D-1 in the 'Study Guide'.

(※) Courses without a GA code cannot be counted towards the Education Core credits.)

Table D-1 Graduate Attributes

GA0D	You can clearly design your own career and contribute to realizing scientific, technological, or social innovation through a comprehensive understanding of the knowledge, skills, social responsibilities and ethics required to become an active member of academia and/or industry.
GA1D	You can lead in realizing scientific, technological, or social innovation by acquiring the advanced leadership skills, entrepreneurial skills, knowledge and expertise, and by developing social responsibility necessary for materializing your designed career.

Note Credits for one course cannot be double-counted for both expertise course and entrepreneurship course.

- If you have earned at least two credits in addition to the four mandatory credits (core), 'Entrepreneurship Education Plus' certificate will be issued.

Examples of Courses for Doctoral Program 1

Table D-2 Entrepreneurship courses provided by CEE (Excerpt.)

Elements	Level	Code	Course Title	Credit	Quarter	
Value Creation	600	ENT.V601	Doctoral Introduction to Entrepreneurship 1 (博士アントレプレナーシップ入門 1)	1-0-0	3Q	英語 GA0D 
	600	ENT.V602	Doctoral Introduction to Entrepreneurship 2 (博士アントレプレナーシップ入門 2)	1-0-0	4Q	英語 GA1D 
Career	600	ENT.A621	博士アカデミックリテラシー (Doctoral Academic Literacy)	1-0-0	1Q/2Q/ 3Q/4Q	GA1D/原則として 博士後期課程入学後半年以内は 履修不可
	600		Practice)	0.5-0		GA1D/博士後期 課程入学後半年 以内は履修不可

GA: Knowledge and Skills to be acquired

Examples of Courses for Doctoral Program 2

Table D-3 Entrepreneurship-related courses provided institute-wide (Excerpt.)

No GA

Elements	Level	Code	Course Title	Credit	Quarter	Category	
国際性	600	ENT.G601	Advanced International Experience 1AB for doctoral course (国際経験実践アドバンスト 1AB 博士)	0-0-1	1～2Q		英語 GA なし
	600	ENT.G602	Advanced International Experience 1CD for doctoral course (国際経験実践アドバンスト 1CD 博士)	0-0-1	3～4Q		英語 GA なし
	600	ENT.G603	Advanced International Experience 2AB for doctoral course (国際経験実践アドバンスト 2AB 博士)	0-0-2	1～2Q		英語 GA なし
	600	ENT.G604	Advanced International Experience 2CD for doctoral course (国際経験実践アドバンスト 2CD 博士)	0-0-2	3～4Q		英語 GA なし
	600	ENT.G605	Advanced International Experience 3AB for doctoral course	0-0-3	1～2Q		英語 GA なし

No GA



For those who would like to obtain more than 4 required credits or to take 'Entrepreneurship Education Plus' Curriculum Model



Examples of Courses for Doctoral Program 3

- Each school provides expertise courses that can be regarded as entrepreneurship courses.
- GA has been recognized

Please check the 'Study Guide' for details.

Table ○ Courses that can be regarded as entrepreneurship courses
for ●● Doctoral Program
Entrepreneurship-deemed Courses offered by each School
(Including information about GA)

Note Credits for one course cannot be double-counted for both expertise course and entrepreneurship course.

Summary of Curriculum Models (Important)

Elements	Doctoral	
	Core (Required)	Plus
Global Competencies	4 (GA0D and GA1D)	2
Leadership		
Value Creation		
Career Development		
Total Credits	4	4 + 2

If you earn at least 2 credits in addition to the 4 core (required) credits

↓
Certificate for Plus

- **Only course registration** is required for each model.
(no application or no other procedure is necessary)



How to check credits and GA for entrepreneurship courses in the “Web Services for Students and Faculty”

【Web Services for Students and Faculty” for each student】

修了要件 <物理学コース>

		修了要件	修得済単位	単位数
教養科目群	文系教養科目 (600番台)	2	2	
	アントレプレナーシップ科目 (GA付)	4	4	
	アントレプレナーシップ科目 (GAなし) (注)		0	
	教養科目群 (小計) <A>	6	6	0
専門科目群	講究科目	12	8	
	コース標準学修課程 専門科目 (L)		5	
	コース標準学修課程の専門科目群 (小計) 	12	13	
	コース標準学修課程外の専門科目 <C>		1	
合計 <A+B+C>		24	20	5

No. of credits obtained for Entrepreneurship Courses (a)

Make sure that $a + b \geq 4$

No. of credits obtained courses that can be regarded as entrepreneurship courses (b)

(注) GAなしの科目は、「アントレプレナーシップ科目」の修了要件4単位に含めることはできません。

※「修得済単位」には学生自身が修得した単位数が計上されておりますが、コースでの読み替えを行

要件に満たない項目(テストサイトのみ表示) : 講究科目, 合計

修得済GA

GA0D, GA1D

修了には,

Note: Credits for one course cannot be double-counted for both expertise course and entrepreneurship course.

GAs in entrepreneurship courses acquired so far: both ‘GA0D’ and ‘GA1D’ must be displayed here by the end of the doctoral program. GAs acquired in entrepreneurship-deemed courses offered in each expertise course, etc., are also indicated here.