## **Career development courses**

## [Master's Student]

Master's students are required to acquire the necessary credits in the career development courses with fulfilling all the Graduate Attributes (GA) shown in Table MA-1 by the end of your master's degree program. In addition to the career development courses each course offers for acquisition of GA, career development courses are offered which are in the 400s and 500s as shown in Table 1. Take appropriate courses according to the completion requirements of your master's degree program. As to the courses with more than one GA, the number of GA stipulated for the courses is considered to be acquired regardless of the credits received for the courses.

#### Table MA-1 Master's Degree Program Graduate Attributes

C0M	Able to delineate one's career plan clearly and recognize the skills necessary to materialize the plan, also considering
	its relations to the society
C1M	Able to utilize its own expertise to the development of academia and technology, and work with others with different
	expertise to contribute to problem-solving

Course	Course	Course	e title	Credits	GA*	Comments
category	number					
	LAC.M401		Master's Career Design	1-0-0	C0M	
	LAC.M402		Master's Career Plan	1-0-0	C0M	
	LAC.M403	*	Strategies for Balancing Career, Personality and Lifestyle (Master Course)	1-0-0	C0M	
400	LAC.M413		Master's Career Design Practice	0-1-0	C0M	
level	LAC.M443	*	Master's Developing Career Adaptability for Global Competitiveness	1-0-0	C1M	
	LAC.M448	*	Master's Critical Thinking	1-0-0	C1M	
	LAC.M451	*	Master's Technical Discussion	0-1-0	C1M	
	LAC.M457	*	Master's Technical Writing	0-1-0	C1M	
500	LAC.M511		Smart Business Career Development	1-0-0	C1M	
level						

Table 1: Master's Degree Program courses (400 and 500 levels)

LAC.M521		Ethics of Scientists (Master Course)	1-0-0	C0M,	
				C1M	
LAC.M525		Ethics of Engineers (Master Course)	1-0-0	C0M,	
				C1M	
LAC.M531		Pre ALP Practice	1-0-0	C1M	Refer to the syllabus
					for details
LAC.M533		Outline of Technology Management	1-0-0	C1M	Creation of new
					course, effective from
					2018 AY
LAC.M537		Social Contributions through Research	1-0-0	C1M	
LAC.M562	*	Master's Scientific Communication	1-0-0	C1M	

Note:

## • ★ : offered in English in principle

### **\***GA: Graduate Attributes

• The character preceding the three digits in the course number denotes the course's subdiscipline (i.e., "D" represents the subdiscipline code in

the course number ABC.D400.R): M (Master's degree program)

# 【Graduate Attributes (GA) Table】

C0M : Able to delineate one's career plan clearly and recognize the skills	C1M : Able to utilize its own expertise to the development of academia and
necessary to materialize the plan, also considering its relations to the society	technology, and work with others with different expertise to contribute to
	problem-solving
Master's Career Design     Master's Career Plan	<ul> <li>Master's Developing Career Adaptability for Global Competitiveness</li> <li>Master's Critical Thinking</li> </ul>
<ul> <li>Strategies for Balancing Career, Personality and Lifestyle</li> <li>Master's Career Design Practice</li> <li>Ethics of Scientists</li> </ul>	<ul> <li>Master's Technical Discussion</li> <li>Master's Technical Writing</li> <li>Smart Business Career Development</li> </ul>
• Ethics of Engineers	Ethics of Scientists     Ethics of Engineers     Pre ALP Practice
	<ul> <li>Outline of Technology Management</li> <li>Social Contributions through Research</li> </ul>
	Master's Scientific Communication

## [Doctoral Student]

Doctoral degree program students are required to fulfill the following conditions;

- Register in either the Academic Leader Program (ALP) or the Productive Leader Program (PLP) based on their individual career plans. IIDP will ask you the registration of the programs 6 months after your doctoral degree program started.
- Each program will require the acquisition of Graduate Attributes (GA) shown below. Through career development courses established by the IIDP, or equivalent courses specified by your department, the students are required to earn 4 credits which should meet the 4 Graduate Attributes (GAs).
- As to the courses with more than one GA, the number of GA stipulated for the courses is considered to be acquired regardless of the credits received for the courses.

Students enrolled in the educational program for leading graduate schools or in the Tokyo Tech Academy for Leadership (ToTAL) may be offered courses recognized as equivalent to Career Development Courses besides those listed here. For details about available courses or completion requirements, please refer to the Study Guide of the Academy that offers the relevant program.

(%1) In addition, when making a change in registration from the curriculum to ALP or PLP, GAs attained as career skills in the educational program can be carried over to ALP or PLP.

A0D	You will be able to precisely draw your own career plan and self-train yourself to acquire the skills required for
	attaining your goals in the academic field
A1D	You will be able to ascertain the true nature of phenomena, master the secret of learning, and lead the pioneering
	of a new academic discipline or research area
A2D	You will be able to understand the position of academia in society, and adequately explain the academic progress
	to members of society, which is the stakeholder
A3D	You will be able to nurture junior students in educational institutions, inculcating in them an interest in academics
	and enabling them to later join in the pioneering of new academic disciplines or research areas

#### Table A-1 Academic Leader Program (ALP) Graduate Attributes

#### Table A-2 Productive Leader Program (PLP) Graduate Attributes

P0D	You will be able to precisely draw your own career plan and self-train yourself to acquire the skills required for
	attaining your goals in the industry, etc.
P1D	You will be able to precisely grasp the needs of society and detect its problems, and lead the future developments
	in science and technology
P2D	While leading teams consisting of members with varied specialties and value systems, you will be able to create
	products and enterprises that bring forth new values in the society
P3D	Through the project, you will be able to nurture junior students, enabling them to later join in the development of
	next generation society and industry

#### (X1) Updated in October, 2018

Course	Course	Course	e title	Credits	GA*	Comments
category	number		Γ			
	LAC.A621		ALP Introduction	1-0-0	A1D	
	LAC.A631		ALP Practice I (Teaching Practice)	0.5-0-0.5	A2D,	Offered in English as
					A3D	needed
						The application document
						for this course is necessary
	LAC.A635		ALP Practice II (Overseas Training)	0-0-1	A2D,	Offered in English as
					A3D	needed
						The application document
						for this course is necessary
	LAC.A641		ALP Advanced Practice I	0-0-1	A1D,	Cancelled in 2018 AY
					A2D,	
					A3D	
	LAC.A642		ALP Advanced Practice II	0-0-1	A1D,	Refer to OCW-i for details
					A2D,	
					A3D	
600	LAC.A643		ALP Advanced Practice III	0-0-1	A1D,	Refer to OCW-i for details
level					A2D,	
level					A3D	
	LAC.A644		ALP Advanced Practice IV	0-0-1	A1D,	Refer to OCW-i for details
					A2D,	
					A3D	
	LAC.A645		ALP Advanced Practice V	0-0-1	A1D,	Creation of new course,
					A2D,	effective from 2018 AY
					A3D	Refer to OCW-i for details
	LAC.C601		Doctoral Career Design	1-0-0	A0D,	
					P0D	
	LAC.C602		Doctoral Career Plan	1-0-0	A0D,	
					P0D	
	LAC.C603	*	Strategies for Balancing Career,	1-0-0	A0D,	
			Personality and Lifestyle		P0D	
	LAC.C621		Ethics of Scientists and Engineers	1-0-0	A2D,	Creation of new course,
					A3D,	effective from 2018 AY
					P1D,	
					P3D	

### Table 2: Doctoral Degree Program courses (600 level)

LAC.C643	*	Developing Career Adaptability for Global	1-0-0	A0D,	Addition of GA (A0D,
		Competitiveness		A2D,	P0D), effective from 2018
				A3D,	AY
				P0D,	
				P2D,	
				P3D	
LAC.C648	*	Critical Thinking	1-0-0	A2D,	
				A3D,	
				P2D,	
				P3D	
LAC.C651	*	Technical Discussion	0-1-0	A2D,	
				A3D,	
				P2D,	
				P3D	
LAC.C657	*	Technical Writing	0-1-0	A1D,	
				P1D	
LAC.C662	*	Scientific Communication	1-0-0	A2D,	
				A3D,	
				P2D,	
				P3D	
LAC.P622		PLP Introduction	1-0-0	P1D	
LAC.P632		PLP Practice 1	0-0-1	P2D,	Offered in English as
				P3D	needed
					Change of course name
					(former course name : PLP
					Practice), effective from
					3Q, 2018 AY
					Refer to the IIDP website
					for details
LAC.P633		PLP Practice 2	0-0-2	P2D,	Offered in English as
				P3D	needed
					Creation of new course,
					effective from 3Q, 2018
					AY
					Refer to the IIDP website
				1	for details

LAC.P634	1	PLP Practice 4	0-0-4	P2D,	Offered in English as
LAC.P034		PLP Practice 4	0-0-4	P2D, P3D	needed
				PSD	
					Creation of new course,
					effective from 3Q, 2018
					AY
					Refer to the IIDP website
					for details
LAC.P642		PLP Advanced Practice	0-1-0	P1D,	Refer to the IIDP website
				P2D,	for details
				P3D	
LAC.P652	*	R&D Activities of Global companies I	1-0-0	P1D	
LAC.P654	*	R&D Activities of Global companies II	1-0-0	P1D	
LAC.P657		Technology Management Practice	1-0-0	P1D	Cancelled in 2018 AY
LAC.P661		Recurrent Program Advanced Practice 1	0-0-1	P0D,	Offered in English as
				P1D,	needed
				P2D,	
				P3D	
LAC.P662		Recurrent Program Advanced Practice 2-1	0-0-2	P0D,	Offered in English as
				P1D,	needed
				P2D,	Change of course name
				P3D	(former course name :
					Recurrent Program
					Advanced Practice 2),
					effective from 3Q, 2018
					AY
LAC.P665		Recurrent Program Advanced Practice 2-2	0-0-2	P0D,	Offered in English as
	1			P1D,	needed
				P2D,	Creation of new course,
	1			P3D	effective from 3Q, 2018
					AY
LAC.P663		Recurrent Program Advanced Practice 3	0-0-3	P0D,	Offered in English as
	1			P1D,	needed
	1			P2D,	
				P3D	
	1				

	LAC.P664			Recurrent Program Advanced Practice 4	0-0-4	P0D,	Offered in English as
						P1D,	needed
						P2D,	
						P3D	
Note:							
• ★ : offer	ed in English in j	prine	ciple				
*GA: Gr	*GA: Graduate Attributes						
• The chara	• The character preceding the three digits in the course number denotes the course's subdiscipline (i.e., "D" represents the subdiscipline code in						
the course	the course number ABC.D600.R): A (Academic Leader Program), P (Productive Leader Program), C (Common for both programs)						

# 【Graduate Attributes (GA) Table】 アカデミックリーダー教育院 (ALP)

A0D: You will be able to precisely draw your own career plan and self- train yourself to acquire the skills required for attaining your goals in the academic field	A1D: You will be able to ascertain the true nature of phenomena, master the secret of learning, and lead the pioneering of a new academic discipline or research area	A2D:You will be able to understand the position of academia in society, and adequately explain the academic progress to members of society, which is the stakeholder	A3D: You will be able to nurture junior students in educational institutions, inculcating in them an interest in academics and enabling them to later join in the pioneering of new academic disciplines or research areas
<ul> <li>Doctoral Career Design</li> <li>Doctoral Career Plan</li> <li>Strategies for Balancing Career, Personality and Lifestyle</li> <li>Developing Career Adaptability for Global Competitiveness</li> </ul>	<ul> <li>ALP Introduction</li> <li>ALP Advanced Practice I</li> <li>ALP Advanced Practice II</li> <li>ALP Advanced Practice III</li> <li>ALP Advanced Practice IV</li> <li>ALP Advanced Practice V</li> <li>Technical Writing</li> </ul>	<ul> <li>ALP Practice I(Teaching Practice)</li> <li>ALP Practice II(Overseas Training)</li> <li>ALP Advanced Practice I</li> <li>ALP Advanced Practice III</li> <li>ALP Advanced Practice III</li> <li>ALP Advanced Practice IV</li> <li>ALP Advanced Practice V</li> <li>Ethics of Scientists and Engineers</li> <li>Developing Career Adaptability for Global Competitiveness</li> <li>Critical Thinking</li> <li>Technical Discussion</li> <li>Scientific Communication</li> </ul>	<ul> <li>ALP Practice I(Teaching Practice)</li> <li>ALP Practice II(Overseas Training)</li> <li>ALP Advanced Practice I</li> <li>ALP Advanced Practice II</li> <li>ALP Advanced Practice III</li> <li>ALP Advanced Practice IV</li> <li>ALP Advanced Practice V</li> <li>Ethics of Scientists and Engineers</li> <li>Developing Career Adaptability for Global Competitiveness</li> <li>Critical Thinking</li> <li>Technical Discussion</li> </ul>

## プロダクティブリーダー教育院 (PLP)

P0D: You will be able to precisely draw your own career plan and self- train yourself to acquire the skills required for attaining your goals in the industry, etc.	P1D: You will be able to precisely grasp the needs of society and detect its problems, and lead the future developments in science and technology	P2D: While leading teams consisting of members with varied specialties and value systems, you will be able to create products and enterprises that bring forth new values in the society	P3D: Through the project, you will be able to nurture junior students, enabling them to later join in the development of next generation society and industry
<ul> <li>Doctoral Career Design</li> <li>Doctoral Career Plan</li> <li>Strategies for Balancing Career, Personality and Lifestyle</li> <li>Developing Career Adaptability for Global Competitiveness</li> <li>Recurrent Program Advanced Practice 1</li> <li>Recurrent Program Advanced Practice 2-1</li> <li>Recurrent Program Advanced Practice 2-2</li> <li>Recurrent Program Advanced Practice 3</li> <li>Recurrent Program Advanced Practice 4</li> </ul>	<ul> <li>Ethics of Scientists and Engineers</li> <li>Technical Writing</li> <li>PLP Introduction</li> <li>PLP Advanced Practice</li> <li>R&amp;D Activities of Global companies I</li> <li>R&amp;D Activities of Global companies III</li> <li>Technology Management Practice</li> <li>Recurrent Program Advanced Practice 1</li> <li>Recurrent Program Advanced Practice 2-1</li> <li>Recurrent Program Advanced Practice 2-2</li> <li>Recurrent Program Advanced Practice 3</li> <li>Recurrent Program Advanced Practice 4</li> </ul>	<ul> <li>Developing Career Adaptability for Global Competitiveness</li> <li>Critical Thinking</li> <li>Technical Discussion</li> <li>Scientific Communication</li> <li>PLP Practice 1</li> <li>PLP Practice 2</li> <li>PLP Practice 2</li> <li>PLP Advanced Practice</li> <li>Recurrent Program Advanced Practice 1</li> <li>Recurrent Program Advanced Practice 2-1</li> <li>Recurrent Program Advanced Practice 2-2</li> <li>Recurrent Program Advanced Practice 2-2</li> <li>Recurrent Program Advanced Practice 3</li> <li>Recurrent Program Advanced Practice 3</li> <li>Recurrent Program Advanced Practice 4</li> </ul>	<ul> <li>Ethics of Scientists and Engineers</li> <li>Developing Career Adaptability for Global Competitiveness</li> <li>Critical Thinking</li> <li>Technical Discussion</li> <li>Scientific Communication</li> <li>PLP Practice 1</li> <li>PLP Practice 2</li> <li>PLP Practice 4</li> <li>PLP Advanced Practice</li> <li>Recurrent Program Advanced Practice 1</li> <li>Recurrent Program Advanced Practice 2-1</li> <li>Recurrent Program Advanced Practice 2-2</li> <li>Recurrent Program Advanced Practice 2-1</li> <li>Recurrent Program Advanced Practice 3</li> <li>Recurrent Program Advanced Practice 3</li> <li>Recurrent Program Advanced Practice 4</li> </ul>

## Reference: Tokyo Tech Academy for Leadership (ToTAL)

A0D/P0D	A1D•A2D•A3D/P1D•P2D•P3D	A0D•A3D/P0D•P3D
<ul> <li>Policy-making Workshop</li> <li>Entrepreneurship and Career planning</li> </ul>	Leadership Off-Campus Project	Practical Group Work for Leadership     Advanced Group Work for Leadership