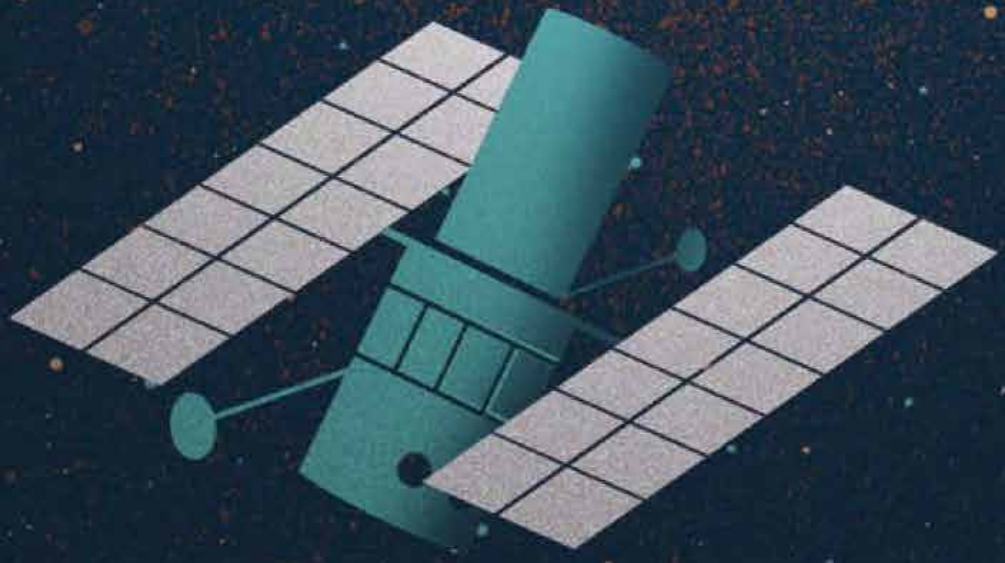
INTERNATIONAL SPACE UNIVERSITY

2020·2021

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MASTER OF SPACE STUDIES

The ISU Master of Space Studies Program (MSS) is intended for individuals seeking professional development, further academic study, or both, through a one- or two-year graduate degree program. For experienced professionals, the MSS supports career advancement, a shift of career within the space sector or a career move into the space sector. For students who wish to make their careers in space, the MSS supports entry into the sector through access to space agencies, space commerce, space research and related actors.

The MSS aims are to:

Provide an interdisciplinary, international, intercultural (3Is) Master's course for highly-motivated students from a diverse range of educational, cultural and professional backgrounds.

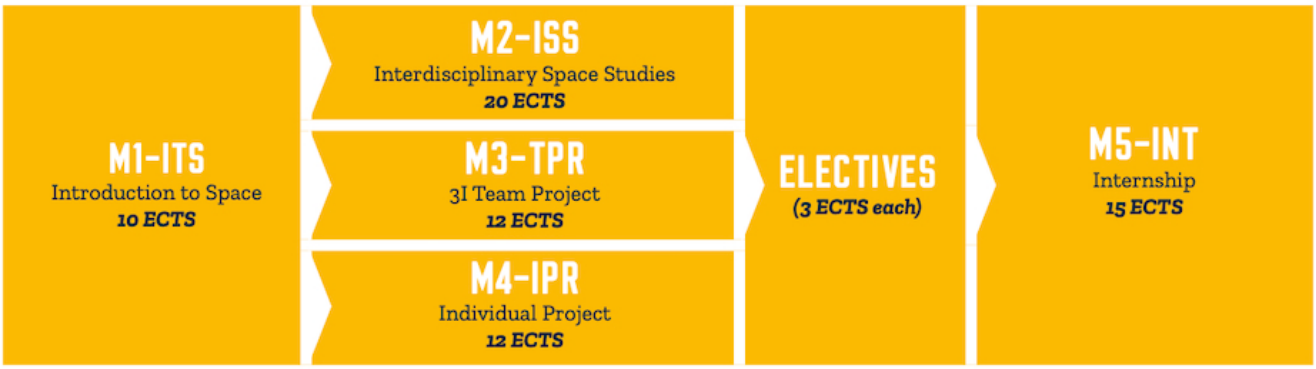
Deliver high-quality 3Is education in the space domain and associated areas which both enhances students' knowledge, skills and effectiveness and offers them the opportunity to achieve their full potential.

Maintain, promote and build productive links with the global space community, including ISU alumni, and use these to provide a contemporary 'real-world' dimension to the program.

Produce graduates capable of contributing effectively and holding responsible positions within the global space sector.

MSS 2019 students come from 18 different countries. Their average age is 29 and 29% of them held degrees at Master's level or higher.

MSS STRUCTURE



The MSS is structured as a one-or two year program. The first year is essentially a taught one and is delivered primarily at the ISU Central Campus in Strasbourg. Some students will take only this year and graduate with a Master of Space Studies. During the first year, students who perform at an appropriate level may apply for the second 'thesis year' in which they perform a single extended project or scholarly activity, either at ISU, or an appropriate host institution. These students will graduate with a Master of Science in Space Studies with Thesis.

MSS YEAR A

MSS Year A is an intensive year worth 75 ECTS. It consists of three types of module:

CORE MODULES are mandatory taught modules designed primarily to deliver academic program content and are broad and interdisciplinary in their scope.

M1-ITS Introduction to Space (10 ECTS)
M2-ISS Interdisciplinary Space Studies (20 ECTS)

PRACTICE MODULES are mandatory student-activity focused modules, designed to deliver experience in the application of academic program content in a broad 3Is context.

M5-INT Internship (15 ECTS)
The 12-week internship is usually carried out in a space organisation or other host institution. Supported and advised by ISU, students identify their internship opportunities in accordance with their particular interests/ career goals.

ELECTIVE MODULES are shorter, optional, taught modules designed to deliver academic program content. They are narrower and more discipline-focused than core modules. Students must take two elective modules. During MSS19, the following electives ran:

M7-LSS Life Support Systems for Future Human Space Voyages
M8-CMD ChipSat Spacecraft and Mission Design
M10-ABL Astrobiology

Not all elective modules will necessarily be offered/run each academic year. This will depend on both resourcing and uptake.

MSS Year A can be completed in full-time mode from September of one year to September of the following year or in part-time mode by completing one or more modules per year within a maximum of seven years.

MSS YEAR A CORE AND PRACTICE MODULE AIMS

M1-ITS Introduction To Space

☞ To introduce students to the fundamental MSS disciplines and build a firm foundation for interdisciplinary study in subsequent modules.

☞ To develop students' transferable skills, including intercultural awareness, time management, team working, written communication and oral presentations.

M2–ISS Interdisciplinary Space Studies

☞ To extend students' knowledge of the MSS disciplines and enhance their understanding of the interdisciplinary links between them.

☞ To demonstrate the integrated and interdisciplinary nature of space activities.

M3-TPR 3I Team Project

☞ To provide students with experience in interdisciplinary, intercultural and international (3I) teamwork.

☞ To develop in students the relevant skills (e.g., research, problem-solving, design, communication, organizational and project management) required to perform a significant 3I project in a 3I team environment.

☞ To allow students to engage with and apply principles learned elsewhere in the course and apply them in a 3I context.

M4-IPR Individual Project

☞ To provide students with experience of performing a significant individual piece of investigative work characterized by a requirement for

☞ To develop in students a professional level of communication (orally, graphically and in writing).

☞ To encourage students to explore the current limits of knowledge and demonstrate originality and creativity.

M5-INT Internship

☞ To allow participants to apply their knowledge and skills to on-going activity in a real-world space context.

☞ To provide participants with the opportunity to establish professional links within the global space community.

MSS YEAR B (OPTIONAL)

MSS Year B consists of a single module:

M14-THP
Thesis Project
(45 ECTS)

Taking MSS Year B is not an automatic right of all students taking MSS Year A. Eligibility for MSS Year B is assessed during Year A. Subject also to a suitable Thesis Project being approved, successful candidates may then transfer to the two-year program. Thesis Projects may take place at ISU's Strasbourg Central Campus or at other institutions/organizations as appropriate.

MSS Year B can be completed in full-time mode over seven months or in part-time mode over a longer period within a maximum of seven years from the start of MSS Year A.

THE AIMS OF M14-THP ARE

☞ To enhance students' individual knowledge in a given area of intellectual enquiry significantly above its initial level.

☞ To develop students' individual research, design, development, problem solving, communication, organizational and project management skills.

☞ To allow students to apply the knowledge gained in the first year of the MSS and apply relevant principles in a multidisciplinary context.

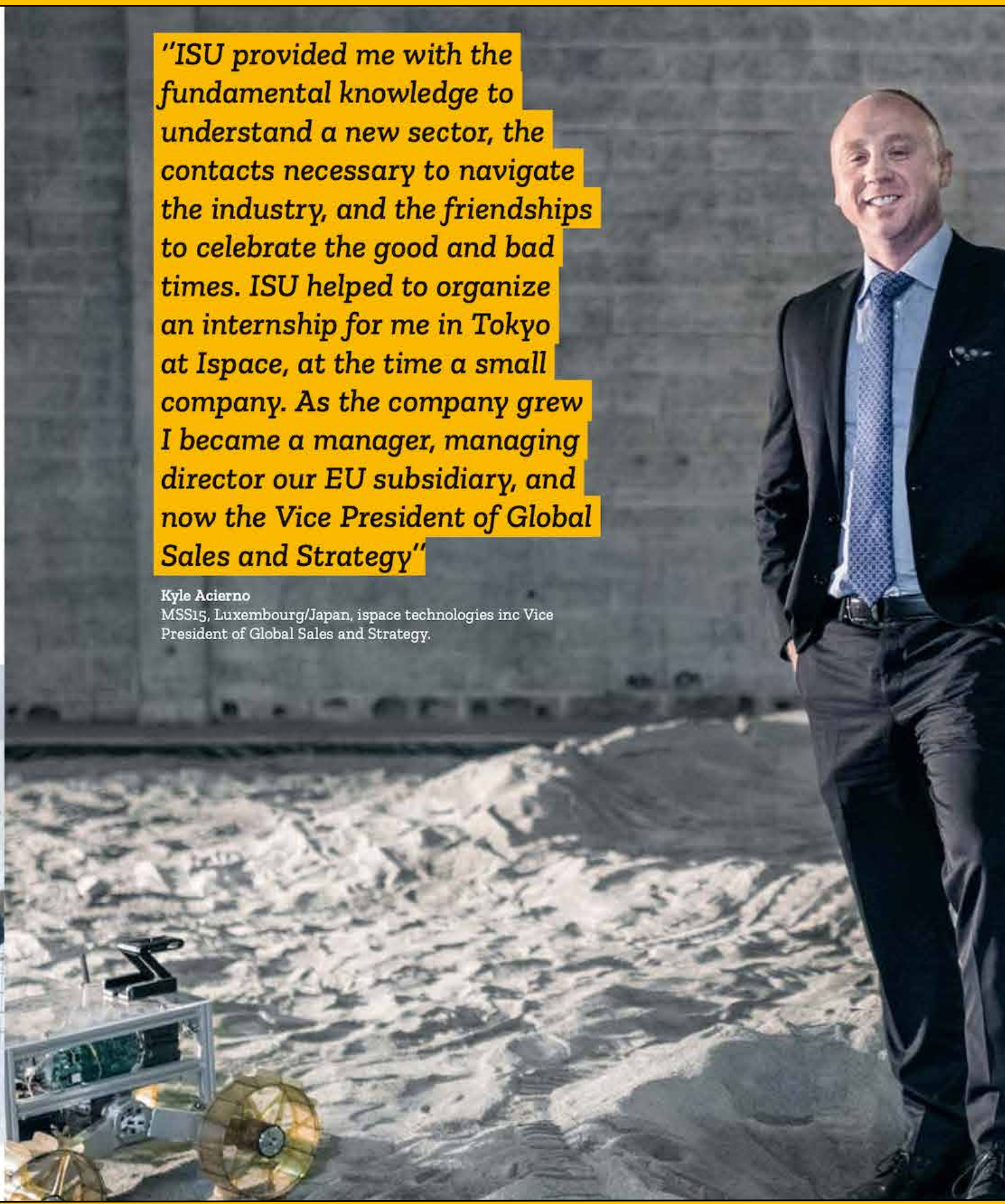
☞ To refine students' communication skills in a variety of forms, e.g. oral presentations, written reports, graphically, etc.

PROFESSIONAL VISITS

During the academic year, students have the opportunity to visit significant space-related enterprises and activities in Europe. Previously, visits have been made to Airbus Defence and Space, Safran Aircraft Engines, SES, European Space Operation Centre, European Space Agency HQ, European Astronaut Centre, CNES (French Space Agency), EUMETSAT, Telespazio Vega, UNESCO, University of Stuttgart Institute for Space Research and DLR (German Space Agency). Outside of the official MSS programme some students have organized their own visits to the ESA launch site in French Guiana, the European Space Technology Centre in The Netherlands and space-related facilities in Russia.

LANGUAGE CLASSES

Before the start of the MSS program, students are given the opportunity to attend a week of intensive French classes. We highly recommend taking advantage of these classes in order to obtain a good basic level of French early on, before the program work intensifies. These French classes are continued during M1-ITS at two levels: Beginner and Intermediate. English classes are also offered during Module 1 to those students wishing to improve their English language skills in order to follow better the program.



"ISU provided me with the fundamental knowledge to understand a new sector, the contacts necessary to navigate the industry, and the friendships to celebrate the good and bad times. ISU helped to organize an internship for me in Tokyo at Ispace, at the time a small company. As the company grew I became a manager, managing director our EU subsidiary, and now the Vice President of Global Sales and Strategy"

Kyle Acierno
MSS15, Luxembourg/Japan, ispace technologies inc Vice President of Global Sales and Strategy.

PROGRAMS	ADMISSION REQUIREMENTS	FEES	DEADLINES
MSS	Applicants must have a Bachelor's Degree or the equivalent, including 3 years of studies as a minimum, awarded by an accredited university. Preference is given to applicants holding higher academic degrees and to applicants with professional experience in industry, government agencies or academic institutions	The tuition fees for MSS 2020-2021 are **EUR 25,000**. A registration fee of EUR 400 will be charged each time the student registers for a subsequent module or series of modules during an additional academic year. Students who choose this option must complete their degree within seven years. The tuition fees for each module are as follows: ☞ Module 1: EUR 5,500 ☞ Module 2: EUR 7,500 ☞ Module 3: EUR 3,500 ☞ Module 4: EUR 3,500 ☞ Electives: EUR 2,000 ☞ Module 5: EUR 3,000 ☞ MSS Year B (optional): EUR 7,500	**Application deadline: 15 March** MSS 2020-2021 applicants who do not require funding through ISU may apply until **30 June**.

INTERNATIONAL SPACE UNIVERSITY

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