

Study Program: Aviation Engineering

Description: Aviation is the bridge of our country. It connects our archipelago and people by carrying passengers and goods. With the introduction of low-cost carrier airlines, the aviation industry is growing at a faster rate. Large numbers of aircraft operated by airlines requires more pilots, maintenance personnel, airport staffs, air traffic controllers and other indirect job positions. The quality of aviation personnel is an important aspect in managing and operating the aviation industry. The International Joint Seminar IULI-EASA on Higher Education for Aviation Profession (Jakarta, 2019) recommended involving higher education (university) to improve the profession standard of aviation. The future requirements for aviation professionals do not only focus on licensing, but also on analytical thinking to face the future challenges. In the near future, a novel development in Unmanned Aerial Systems (UAS) or drones will become part of our daily life. Parcel delivery, aerial photography, wildlife monitoring, search/rescue and agriculture are several applications of UAS. This technology will require new set of manpower specifications including designing, developing, testing, and operation. We involved our international partner universities in improving the knowledge and experience of our students to be prepared for the future challenges in aviation with several program such as double degree and exchange students. Aviation Engineering at IULI will empower its graduates with an industrial based curriculum, experienced faculty members, and the opportunity to build a professional career in an international environment.

Field of Studies: Aerodynamics • Propulsions • Flight Dynamics • Flight Control • Flight Operation • Unmanned Aerial Systems • Air Traffic Management • Aircraft Maintenance • Flight Testing

General Information:

Legal Base / Accreditation:	SK DIKTI No. 425/E/O/2014
Duration of Study:	4 years (8 semester)
Academic Year:	2 semesters (even + odd) Even Semester: February - July Odd Semester: August - January
Academic weeks/semester:	16 (14 academics + 2 exams)
SKS ¹ per semester:	Max. 24
SKS per study:	144-160
Duration of a lecture:	50 minutes
Number of students per subject:	16-32
Language of Instruction:	English
Academic Degree:	Indonesia: Sarjana Teknik – S.T. (S1) International: Bachelor of Science (B.Sc)
Tuition Fee/semester:	Rp. 29.900.000
Online Application:	https://pmb.iuli.ac.id

¹ SKS: 1 SKS (preparation, lecture, exercises)

Study Program Description



Academic Year 2022/2023 – Bachelor Degree Programs

Structure of a study:

1	2	3	4	5	6	7	8
Semester 1-6: Academic Education (see curriculum), OFSE (Oral Final Study Examination)							
Semester 7: Research Semester (abroad for Double Degree)							
Semester 8: Thesis Defense, Graduation							

Score System:

Grade Letter	Grade Wording	IULI	Indonesian Grade	Germany Grade	Grade Descriptions	Student Representation
A	Excellent	86-100	4	1	Outstanding Performance	10%
B	Good	71-85	3.0-3.9	2	Performance is considerably higher than the average requirements	25%
C	Satisfactory	56-70	2.0-2.9	3	Performance meets the average requirements	30%
D	Poor	46-55	1.0-1.9	4	Performance is poor and likely to lead to failure	25%
F	Fail	<45	0	5	Performance does not meet the minimum criteria. Considerable further work is required	10%

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DAAD



Federal Ministry
of Education
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Jl. BSD Grand Boulevard
BSD City 15345
Island of Java

Study Program Description



Academic Year 2022/2023 – Bachelor Degree Programs

Curriculum: in SKS

No	Subject	Semester								Total
		1	2	3	4	5	6	7	8	
University Subjects										
1	English	2	2	2	2	1	1			10
2	Computer Network & IT Security	2								2
3	Applied Statistics		2							2
4	Research Methodology		2							2
5	Environment Sciences			2						2
6	Civics				2					2
7	Ethics and Religious Philosophy					2				2
8	Innovation & Product Development					2				2
9	E-Commerce						2			2
10	Indonesian Language & Culture						2			2
11	Pancasila						2			2
12	Oral Final Study Examination (OFSE)						0			0
13	Research Semester							6		6
14	Internship / Project								3	3
15	Thesis / Thesis Defence								6	6
	Total University Subjects	4	6	4	4	5	7	6	9	45
Engineering Faculty Subjects										
1	Introduction to Engineering	1								1
2	Chemistry	2								2
3	Material Science	2								2
4	Engineering Mathematics 1,2	3	3							6
5	Physics & Laboratory 1,2	3	3							6
6	Algorithm and Programming 1,2	3	3							6
7	Electrical Engineering & Laboratory	3	3							6
8	Engineering Drawing / CAD 1	3								3
9	Statics and Mechanics of Materials		4							4
10	Manufacturing Process			2						2
11	Applied Mathematics			3						3
12	Metrology and Quality Control			2						2
13	Computer Aided Design – CAD 2			3						3
14	Engineering Economy					2				2
15	System Design 1,2					3	3			6
16	Engineering Management						2			2
	Total Engineering Faculty Subjects	20	16	10	0	5	5	0	0	56

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No	Subject	Semester								Total
		1	2	3	4	5	6	7	8	
Aviation Engineering Department Subjects										
1	Operation Research			3						3
2	Machine Elements			3						3
3	Basic Aviation Eng. Practical Training			2						2
4	Thermo-Fluid Science 1,2			2	2					4
5	Kinematics & Dynamics of Machines				3					3
6	Flight Dynamics				2					2
7	Aircraft Propulsion				3					3
8	Aviation Airworthiness, Safety & Reg.				2					2
9	Aerodynamics 1,2				2	2				4
10	Aircraft Performance					2				2
11	Aircraft Systems and Components 1,2					2	2			4
12	Flight Control 1,2					2	2			4
13	Human Factors in Aviation						2			2
14	Pneumatics and Hydraulics						3			3
15	Aviation Elective Subjects				3	4	3			10
	Total Aviation Eng. Dept. Subjects	0	0	10	17	12	12	0	0	51
	University Subjects	4	6	4	4	5	7	6	9	45
	Engineering Faculty Subjects	20	16	10	0	5	5	0	0	56
	Aviation Engineering Department Subjects	0	0	10	17	12	12	0	0	51
	Total	24	22	24	21	22	24	6	9	152
Aviation Elective Subjects										
1	Flight Navigation				3					
2	Airline Operation					2				
3	Airport System					2				
4	Aircraft Maintenance Engineering					2				
5	Flight Test Engineering						3			