

Program Studi: Teknik Penerbangan

Deskripsi: Penerbangan adalah “jembatan” negara kita. Ia menghubungkan kepulauan kita dan orang-orang dengan membawa penumpang dan barang. Dengan diperkenalkannya maskapai penerbangan berbiaya rendah, industri penerbangan tumbuh lebih cepat. Dengan begitu, sejumlah besar pesawat yang dioperasikan maskapai penerbangan membutuhkan lebih banyak tenaga pilot, personel pemeliharaan, staf bandara, pengawas lalu lintas udara, dan posisi pekerjaan tidak langsung lainnya. Kualitas personel penerbangan merupakan aspek penting dalam pengelolaan dan pengoperasian industri penerbangan. International Joint Seminar IULI-EASA on Higher Education for Aviation Profession (Jakarta, 2019) merekomendasikan untuk melibatkan perguruan tinggi dalam upaya meningkatkan standar profesi penerbangan. Persyaratan masa depan bagi para profesional penerbangan tidak hanya berfokus pada perizinan, tapi juga pada pemikiran analitis untuk menghadapi tantangan masa depan. Dalam waktu dekat, perkembangan baru dalam Unmanned Aerial Systems (UAS) alias *drone* akan menjadi bagian dari kehidupan kita sehari-hari. Pengiriman paket, foto udara, pemantauan satwa liar, pencarian/penyelamatan, dan pertanian mulai memanfaatkan aplikasi UAS. Teknologi ini akan membutuhkan serangkaian spesifikasi tenaga kerja baru, termasuk dalam perancangan, pengembangan, pengujian, dan pengoperasian. Kami melibatkan universitas mitra internasional dalam meningkatkan pengetahuan dan pengalaman siswa untuk bersiap menghadapi tantangan masa depan di dunia penerbangan dengan beberapa program, seperti gelar ganda dan pertukaran mahasiswa. Teknik Penerbangan di IULI akan memberdayakan lulusannya dengan kurikulum berbasis industri, staf pengajar yang berpengalaman, dan kesempatan untuk membangun karier profesional di lingkungan internasional.

Bidang Studi: Aerodinamika • Propulsi • Dinamika Penerbangan • Kontrol Penerbangan • Operasi Penerbangan • Sistem Udara Tak Berawak • Manajemen Lalu Lintas Udara • Perawatan Pesawat • Pengujian Penerbangan

Informasi Umum:

| | |
|--------------------------------|---|
| Dasar hukum/akreditasi: | SK DIKTI No. 425/E/O/2014 |
| Lama kuliah: | 4 tahun (8 semester) |
| Academic Year: | 2 semester (genap + ganjil) |
| | Semester genap: Februari-Juli |
| | Semester ganjil: Agustus-Januari |
| Minggu akademik/semester: | 16 (14 akademik + 2 ujian) |
| SKS ¹ per semester: | Maksimal 24 |
| SKS per studi: | 144-160 |
| Durasi pengajaran: | 50 menit |
| Jumlah siswa per mata kuliah: | 16-32 |
| Bahasa pengantar: | Bahasa Inggris |
| Kelulusan akademik: | Indonesia: Sarjana Teknik – S.T. (S1) |
| | Internasioanl: Bachelor of Science (B.Sc) |
| Biaya pendidikan/semester: | Rp 29.900.000 |
| Aplikasi <i>online</i> : | https://pmb.iuli.ac.id |

¹ SKS: 1 SKS (persiapan, kuliah, latihan)

Study Program Description



Academic Year 2022/2023 – Bachelor Degree Programs

Struktur Pembelajaran:

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | Semester 1-6: Pendidikan Akademis (lihat kurikulum), Oral Final Study Examination (OFSE) | | | | | | |
| | Semester 7: Semester Penelitian (dua gelar sekaligus untuk dua program studi/ <i>abroad for double degree</i>) | | | | | | |
| | Semester 8: Sidang Skripsi, Kelulusan | | | | | | |

Sistem Skor:

| Nilai (Huruf) | Predikat | IULI | Nilai (Indonesia) | Nilai (Jerman) | Keterangan | Representasi Mahasiswa |
|---------------|-----------|--------|-------------------|----------------|--|------------------------|
| A | Memuaskan | 86-100 | 4 | 1 | Performa luar biasa | 10% |
| B | Bagus | 71-85 | 3.0-3.9 | 2 | Performa di atas rata-rata | 25% |
| C | Cukup | 56-70 | 2.0-2.9 | 3 | Performa memenuhi persyaratan rata-rata | 30% |
| D | Buruk | 46-55 | 1.0-1.9 | 4 | Performa buruk dan cenderung mengarah ke gagal. | 25% |
| F | Gagal | <45 | 0 | 5 | Performa tidak memenuhi kriteria umum. Membutuhkan upaya lebih lanjut untuk perbaikan. | 10% |

Kontak:

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Jl. BSD Grand Boulevard
BSD City 15345
Island of Java

Study Program Description



Academic Year 2022/2023 – Bachelor Degree Programs

Kurikulum: dalam SKS

| No | Mata kuliah | Semester | | | | | | | | Total |
|------------------------------------|--|-----------|-----------|-----------|----------|----------|----------|----------|----------|-----------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
| Mata Kuliah Universitas | | | | | | | | | | |
| 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 mata kuliah universitas | 4 | 6 | 4 | 4 | 5 | 7 | 6 | 9 | 45 |
| Mata Kuliah Fakultas Teknik | | | | | | | | | | |
| 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 mata kuliah Fakultas Teknik | 20 | 16 | 10 | 0 | 5 | 5 | 0 | 0 | 56 |

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Study Program Description



Academic Year 2022/2023 – Bachelor Degree Programs

| No | Mata Kuliah | Semester | | | | | | | | Total |
|---|---|-----------|-----------|-----------|-----------|-----------|-----------|----------|----------|------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
| Mata Kuliah Jurusan Teknik Penerbangan | | | | | | | | | | |
| 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 mata kuliah Teknik Penerbangan | 0 | 0 | 10 | 17 | 12 | 12 | 0 | 0 | 51 |
| | Mata kuliah universitas | 4 | 6 | 4 | 4 | 5 | 7 | 6 | 9 | 45 |
| | Mata kuliah Fakultas Teknik | 20 | 16 | 10 | 0 | 5 | 5 | 0 | 0 | 56 |
| | Mata kuliah jurusan Teknik Penerbangan | 0 | 0 | 10 | 17 | 12 | 12 | 0 | 0 | 51 |
| | Total | 24 | 22 | 24 | 21 | 22 | 24 | 6 | 9 | 152 |
| Mata Kuliah Pilihan Penerbangan | | | | | | | | | | |
| 1 | Flight Navigation | | | | 3 | | | | | |
| 2 | Airline Operation | | | | | 2 | | | | |
| 3 | Airport System | | | | | 2 | | | | |
| 4 | Aircraft Maintenance Engineering | | | | | 2 | | | | |
| 5 | Flight Test Engineering | | | | | | 3 | | | |

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