Abraham Brandon Purnama

Aerospace Engineering Undergraduate | Monash University

Melbourne VIC, Australia | +61 493 178 704 | +62 812 8887 6638

abe.brandon.purnama@gmail.com | linkedin.com/in/abebrandon

Professional Profile

Aerospace Engineering (Honours) undergraduate at Monash University with a WAM of 86.1 and experience in robotic payload CAD, software and hardware development, and bridge modelling. Proficient in Python, MATLAB, SolidWorks and Onshape, with strong foundations in mathematics and physics. Brings mechatronics training, community project coordination and leadership experience, with interests in aerospace technology and fundamental physics.

Education

Monash University | Melbourne, Australia

Bachelor of Engineering (Honours), Aerospace Engineering | 2025-present
Expected graduation: July 2029 | WAM: 86.1 | GPA: 3.875/4.0

Selected completed coursework: Solid Mechanics 1 (91), Engineering Mathematics (90), Engineering Numerical Analysis (89) and Physics for Engineering (85).

SMAK PENABUR Gading Serpong | Tangerang, Indonesia

Mathematics and Natural Sciences | 2022-2025 | Academic average: 93.70/100

Studied the national curriculum with additional Astronomy. Served as President of Peer Educator, a school organisation promoting awareness of drug abuse and bullying.

Technical and Professional Skills

Programming and numerical tools Python, MATLAB

Computer aided design SolidWorks, Onshape; robotic payload and structural modelling

Engineering foundations Mathematics, physics, numerical analysis and mechanics; training in pneumatics, electrical systems, electronics and mechatronics

Project and leadership skills Team collaboration, community project coordination, communications, training coordination and event leadership

Engineering Projects

Warman Project Robot | Design 1 (MMA2001)

Monash University | Team coursework project

- Created CAD models for the team robot, with a particular focus on its payload systems.

Smart Systems Project | ENG1013

Monash University | Team coursework project

- Made substantial contributions to three of five subsystems, developing software and building hardware.

Bridge Model | Engineering Methods (ENG1011)

Monash University | Coursework project

- Held sole responsibility for modelling and designing the bridge model for the unit project.

Engineering Training

FESTO | South Tangerang, Indonesia

Mechatronics Engineering Internship and Training | July 2024

- Completed courses in pneumatics, electrical and electronics engineering, and mechatronics; received an Excellent assessment.

Leadership and Community Experience

Mainkan! | Tangerang, Indonesia

Founding Member and Communications Staff | April 2024-present

Indonesian cultural preservation initiative introducing heritage to children in Tangerang and Jakarta.

- Helped a five-member team coordinate three educational visits, reaching 100 children and contributing 72 community hours collectively.
- Supported communications and community activities for an initiative sponsored by AirAsia and covered by Narasi 24.

Dewan Saka Bhayangkara | Kelapa Dua, Indonesia

First Advisor to the Chairman and Chief Secretary of Tactical Discipline | April 2023-April 2025

- Served as second-in-command to the Chairman and oversaw tactical discipline and training sessions for the Rover Council.
- Served as Vice Chairman of the admission committee for the special unit's fourth regiment.

Dewan Ambalan | Tangerang, Indonesia

First Advisor to the Rover Mate and Chief Secretary of Crew Tradition | January 2023-December 2024

- Advised the Rover Mate during Scout meetings and sessions; led five ceremonies in the Rover Mate's place and served as Chief of Command for a training camp.
- Worked with the Council of Tradition to reform crew traditions, organised a two-day conference on the annual Scouting programme and established a pre-inauguration examination board.

Scholarships and Academic Awards

Beasiswa Garuda | Full Undergraduate Scholarship

Indonesian Ministry of Higher Education, Science, and Technology | Current awardee

Government-funded scholarship supporting undergraduate study, including tuition, living costs and associated study expenses.

Beasiswa Indonesia Maju Preparatory Scholarship

Indonesian Ministry of Education | September 2023-June 2025

Awarded preparatory support for university admission, including IELTS and SAT preparation, college counselling and community project development.

- Gold Medallist, Udayana Physics Championship, University of Udayana | October 2023.
- National Finalist, Indonesian National Science Olympiad in Astronomy | 2023. Ranked 35th nationally, 1st in Tangerang Regency and 6th in Banten Province.
- Semifinalist, Astara Ganesha Competition, Bandung Institute of Technology | September 2023.

Scouting Recognition and Membership

- Eagle Rover Scout | August 2024. Awarded by the Tangerang Regency Council on behalf of the National Council.
- Appointed First Platoon Commander for the 2024 PENABUR National Raimuna, an event attended by more than 3,000 Scouts.
- Association of Top Achiever Scouts (ATAS) | Member since January 2025.

English Language Assessment

IELTS overall score: 8.0; Listening 8.5, Reading 8.5, Writing 6.5, Speaking 8.0. Previous result; validity ended 24 August 2026.