

AMMAR HASAN AL-WALI

+90-535-9799670 | ammar.wali986@gmail.com | blog.metu.edu.tr/e270622/

About Me

Second-year Mechanical Engineering student at METU with experience in CAD modelling and assembly through the design of a two-stroke engine. Interested in gaining hands-on experience with CNC machines, 3D printing, and lathes.

Education

Middle East Technical University (ODTU)

Bachelor of Science in Mechanical Engineering

June 2028

Relevant Coursework: Manufacturing technologies, Computer Aided Design, Materials Science, Strength of Materials, Python for Engineers, Thermodynamics, Statics

Projects

Personal: 125cc Two-Stroke Engine Design

Dec 2025

- Designed a 125cc two-stroke engine in Siemens NX, featuring a bore of 54mm and a stroke of 54.5mm
- Validated the design against industry Benchmark by referencing RSA125 engine technical drawings.
- Prepared manufacturing-oriented engineering drawings for components with dimensions
- Integrated over 8 engine components in a full assembly, ensuring appropriate clearances
- Designed an exhaust, and transfer port duration of 182 and 126 degrees respectively targeting peak engine power delivery at 9,000 rpm

Curricular: Mechatronic System (Intro to Mech Engineering)

May 2025

- Coded and assembled an Arduino mechatronic system as part of a four-person team
- Integrated sensors and components such as ultrasonic sensors, motors, and potentiometer
- Wired components and implemented Arduino control code to activate motor based on sensor input
- Participated in mechanical assembly, and debugging control code

Skills & Interests

Technical: Siemens NX, fusion 360, Python, Arduino, WordPress, Microsoft Office

Interests: CAD and design, CNC machining, additive manufacturing, prototyping and physical assembly, engine design and powertrain systems

Languages: Arabic (Native), English (Native) Turkish Beginner level