AOU Civil Engineering (RTTI) — Student Handbook

B.Eng. Railway, Tunnel & Transport Infrastructure · COREN pathway · Draft

AKPAKIP ORO UNIVERSITY (AOU)
Faculty of Engineering — Department of Civil Engineering
STUDENTS' HANDBOOK (Part I / Draft)
Civil Engineering: Railway, Tunnel and Transport Infrastructure (RTTI) Option

1. Welcome

This handbook explains the Railway, Tunnel and Transport Infrastructure option: what you will study, how you will be assessed, and where to get help. Read it alongside the university's academic regulations.

2. About the Programme

The option trains engineers to plan, design, build and maintain the systems that move people and goods: railways, road networks, tunnels and bridges. Years 1–2 build shared foundations; Years 3–5 add the transport and infrastructure specialisation, culminating in an integrated design project and defence.

Graduate profile

- Apply mathematics, science and engineering principles to infrastructure problems.
- Design and assess highways, railways, tunnels, bridges and foundations to applicable codes.
- Plan construction, control costs and manage quality and safety.
- Consider sustainability, climate resilience and asset management.
- Work ethically and communicate effectively in teams.

Professional registration: COREN pathway. Keep SIWES records and project reports.

3. Programme Structure (5 years / 10 semesters · ~198 units)

Year 1 — Engineering Foundations (34 units)
Year 2 — Core Civil Engineering (43 units)
Year 3 — Transport and Infrastructure Engineering (41 units) — includes Railway Engineering I, Tunnel Engineering Fundamentals
Year 4 — Advanced Design and Industrial Practice (40 units) — Railway Engineering II, Tunnel Construction, Bridge Engineering, SIWES
Year 5 — Specialisation, Integration and Professional Readiness (40 units) — Advanced Highway/Bridge/Tunnel design, Final-Year Design Project and Defence

Key RTTI courses: CVE 315 Railway Engineering I · CVE 316 Tunnel Engineering Fundamentals · CVE 404 Railway Engineering II · CVE 412 Tunnel Construction and Support Systems · CVE 409 Bridge Engineering · CVE 510 Railway and Highway Systems Integration · CVE 511 Advanced Bridge or Tunnel Design · CVE 515 Final-Year Design Project and Defence

4. Assessment

Written exams, assignments, laboratory reports, surveying fieldwork, design projects, presentations/defences, SIWES, final-year project.

5. Graduation portfolio

Transcript · Design and research project reports · SIWES evidence · Laboratory/field reports · Professional development record

Draft for Faculty approval. Course codes and units provisional pending NUC CCMAS reconciliation.
Ojei Bari Avañ Ki

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