

Strategic Plan of the College of Engineering Tikrit University

For the Period (2021–2026)

First: General Framework of the Plan

1. Strategic References

This strategic plan is based on the following:

- a) The Strategic Plan of Tikrit University (2021–2026)
- b) Policies of the Ministry of Higher Education and Scientific Research
- c) National academic accreditation standards of the Iraqi Council for Engineering Education Accreditation, and international standards (ABET) as a guiding reference
- d) Local and regional labor market needs in engineering fields

2. Scope of the Plan

The plan covers:

- a) Undergraduate and postgraduate education
- b) Scientific research
- c) Community service
- d) Governance and administration
- e) Human and financial resources
- f) Infrastructure and technology

Second: Strategic Analysis (SWOT) of the College of Engineering

1. Strengths

- a) Specialized academic staff across various engineering disciplines
- b) Strong alignment of academic programs with labor market needs and national infrastructure sectors
- c) Availability of essential instructional laboratories

- d) High student demand for admission to the college

2. Weaknesses

- a) Limited availability of some advanced laboratories
- b) Insufficient research funding
- c) Need to update curricula in accordance with international standards
- d) Limited effective industrial partnerships

3. Opportunities

- a) Increasing national demand for engineering professionals in Iraq
- b) Scholarship programs and international cooperation opportunities
- c) Digital transformation and e-learning initiatives
- d) Reconstruction and infrastructure development projects

4. Challenges

- a) Competition with private universities
- b) Rapid advancement in engineering technologies
- c) Limited financial allocations
- d) Brain drain and retirement of experienced academic staff
- e) Shortage of mid-level and technical staff in laboratories and workshops

Third: Vision – Mission – Objectives – Values

1. Vision

To supply society with highly skilled engineers possessing strong scientific knowledge and to contribute to industrial development through solid applied scientific research.

2. Mission

The College of Engineering seeks to build and consolidate a culture of excellence in teaching and engineering education, positioning itself as one of the leading choices for engineering students in Iraq. The college is committed to encouraging the recruitment of international students and revitalizing scientific research by supporting innovative ideas and nurturing researchers and leaders in engineering fields. It also focuses on developing academic curricula to enhance students' character and skills, and on building a strong

network of graduates and employers to promote scientific cooperation and ensure continuous institutional support.

3. Objectives

- a. Improving the quality of education by updating curricula and integrating modern technologies into teaching methods
- b. Developing the college's infrastructure to provide an outstanding educational and research environment that meets the needs of students and faculty members
- c. Enhancing scientific research and increasing publication rates in reputable international journals
- d. Improving the local and international ranking of the college and the university by obtaining quality certifications (ISO) and applying European quality standards
- e. Achieving environmental sustainability through the use of renewable energy sources and reducing carbon emissions
- f. Obtaining local and international program accreditation by improving the quality of education, scientific research, and community service

4. Institutional Values

- ✚ Quality and excellence
- ✚ Integrity and transparency
- ✚ Innovation and creativity
- ✚ Teamwork
- ✚ Community service

Fourth: Strategic Objectives of the College of Engineering

Strategic Objective One: Enhancing the Quality of Engineering Education

Goal: To improve the efficiency of educational outcomes in line with national and international standards.

Executive Programs:

1. Updating curricula according to learning outcomes (Graduate Outcomes)
2. Adopting blended and e-learning approaches
3. Developing practical teaching methods
4. Aligning curricula with labor market requirements

Performance Indicators:

- a) Percentage of updated curricula
- b) Student satisfaction
- c) Graduation and employment rates

Strategic Objective Two: Enhancing Scientific Research and Innovation

Goal: To elevate the level of applied scientific research linked to community needs.

Executive Programs:

1. Supporting publication in Scopus-indexed journals and including the Tikrit Journal of Engineering Sciences in Scopus
2. Encouraging joint research projects
3. Establishing specialized research teams
4. Linking graduation projects to real-world problems

Performance Indicators:

- a) Number of published research papers
- b) Number of applied graduation projects
- c) Number of patents
- d) Increase in citation index of the Tikrit Journal of Engineering Sciences

Strategic Objective Three: Developing Human Resources to Improve National and International Rankings

Goal: To build a competent academic and administrative workforce.

Executive Programs:

1. Continuous training and professional development programs
2. Encouraging scholarships and fellowships
3. Incentive system for outstanding performance
4. Developing academic leadership

Performance Indicators:

- a) Number of training courses
- b) Research participation rates
- c) Job performance evaluations

Strategic Objective Four: Developing Infrastructure and Technology and Ensuring Environmental Sustainability

Goal: To provide a modern, motivating educational environment.

Executive Programs:

1. Modernizing engineering laboratories
2. Developing smart classrooms
3. Supporting digital infrastructure

4. Enhancing occupational safety
5. Expanding environmental sustainability projects
6. Encouraging scientific research in sustainability and environmental protection

Strategic Objective Five: Strengthening Partnerships and Community Service

Goal: To utilize engineering expertise in serving the community.

Executive Programs:

1. Partnerships with government institutions
2. Cooperation with the private sector
3. Engineering training courses and consultancy services
4. Community service projects

Fifth: Implementation Timeline (2021–2026)

Year	Key Priorities
2021–2022	Analysis and planning, curriculum updates
2022–2023	Laboratory development, staff training
2023–2024	Partial program accreditation
2024–2025	Expansion of research and partnerships
2025–2026	Evaluation and continuous improvement

Sixth: Monitoring and Evaluation

- ✚ Establishment of a strategic committee within the college
- ✚ Annual performance reports
- ✚ Review of performance indicators
- ✚ Continuous improvement based on evaluation results

Seventh: Conclusion

This strategic plan was developed in alignment with the strategic direction of Tikrit University (2021–2026), ensuring that the College of Engineering plays a leading role in engineering education and national development.