401-500

BUILDING FUTURE LEADERS JUST

JUST

جامعة العلوم والتكنولوجيا الأردنية
Jordan University of Science and Technology

THE WORLD UNIVERSITY RANKINGS

جامعة العلوم والتكنولوجيا الأردنية

ضمن أفضل ٥٠٠ جامعة على مستوى العالم
JUST ranks among the top 500 universities worldwide

Outline

❖ JUST

❖ Faculty of Engineering

❖ Engineering Programs' Accreditation

JUST

Quick Facts

- JUST was established in the year 1986.

- located on the outskirts of Irbid, in northern Jordan, 70 km north Amman, the capital city of Jordan.

- A spacious campus spanning eleven square kilometers.

- Is one of the most advanced and professionally oriented universities in the region.

- Ranked among the top 500 universities worldwide.

- JUST comprises 13 faculties with 55 departments

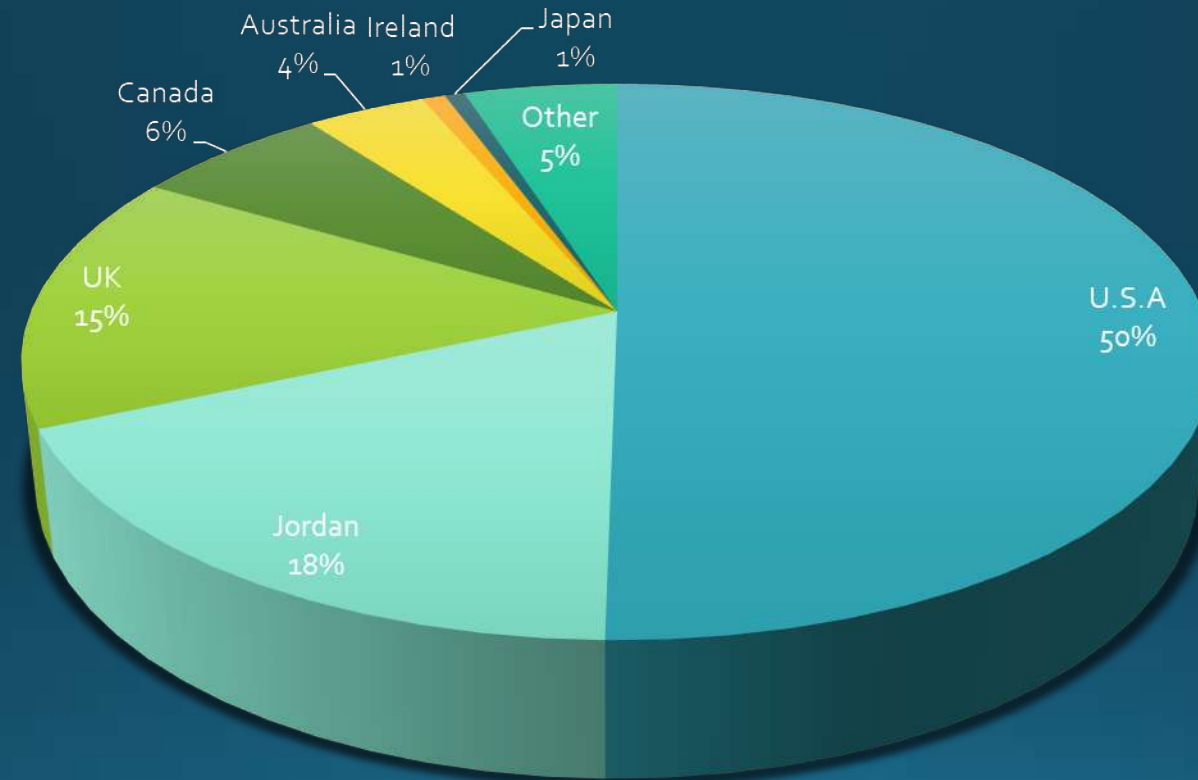- Over 50,000 students have graduated to date.

JUST

Quick Facts

- Current student enrollment:
  - ➤ 22664 undergraduate students
  - ➤ 2099 postgraduate students
  - ➤ 4697 are non-Jordanians from 50 different nationalities.
  - ➤ 20% International students representing the most diverse student body in the kingdom.
- 965 Total Full-Time Faculty members (27.8% Females)
- 2183 Total Administrative & Technical Staff members

Faculty distribution According to Origin of Postgraduate Certificate

JUST

JUST

International Accreditation

Faculty of Engineering

- Accreditation Board for Engineering & Technology (ABET)

Faculty of Veterinary Medicine

- European Association of Establishments for Veterinary Education –EAEVE.

Faculty of Medicine

- **WHO**, World Directory of Medical Schools (Avicenna).
- The AVICENNA Directory is maintained by the University of Copenhagen in collaboration with the World Health Organization and the World Federation for Medical Education (WFME).
- Royal College of Pathology

Faculty of Dentistry

- CODA
- RCS (Ir)
- MFD Exam Center (2004)
- FFD Exam Center (2006)
- The Lloyd's Register Quality Assurance (LRQA)

Faculty of Architecture & Design:

- NAAB (National Architectural Accrediting Board)

Health Center:

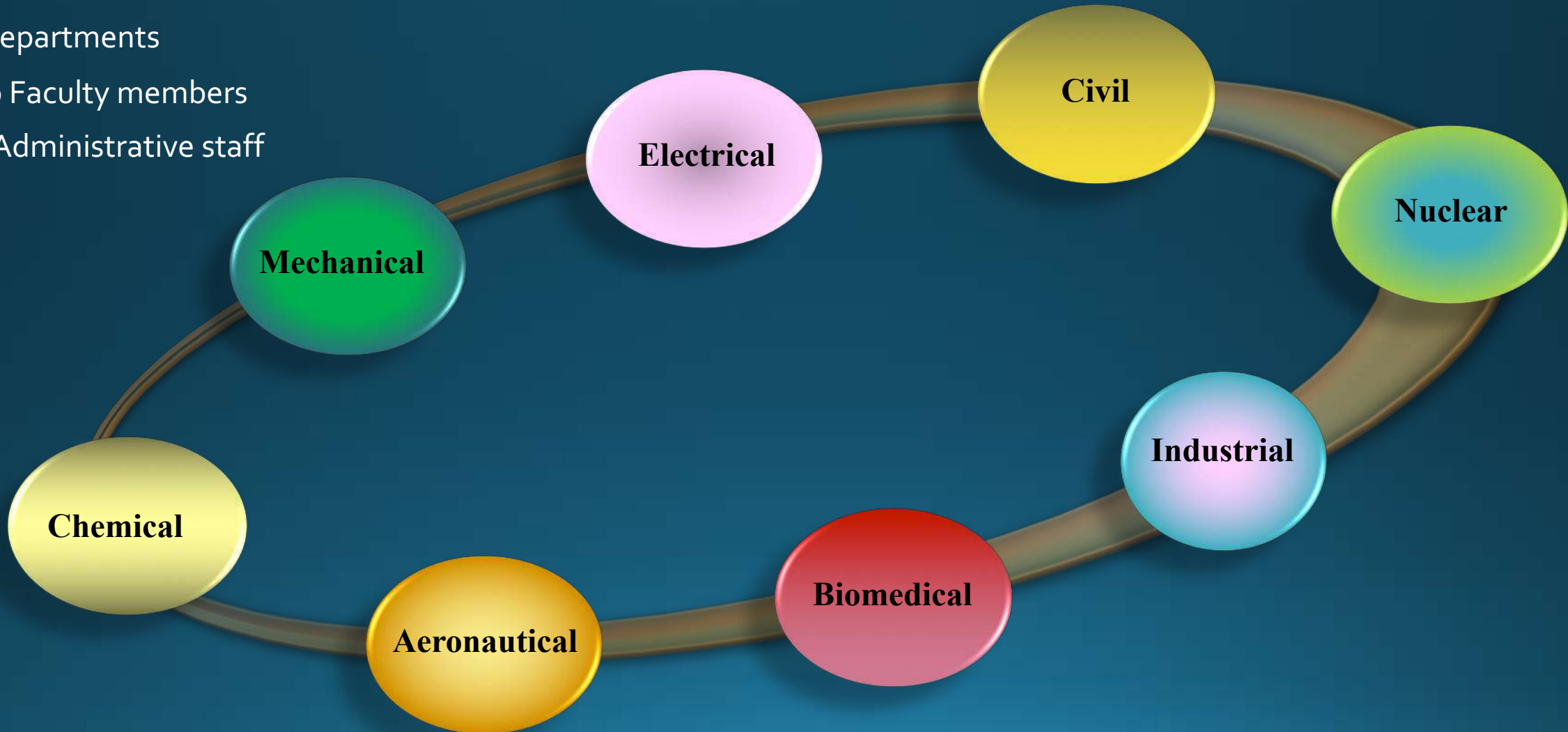- Health Care Accreditation Council (HCAC)

King Abdullah University Hospital (KAUH)

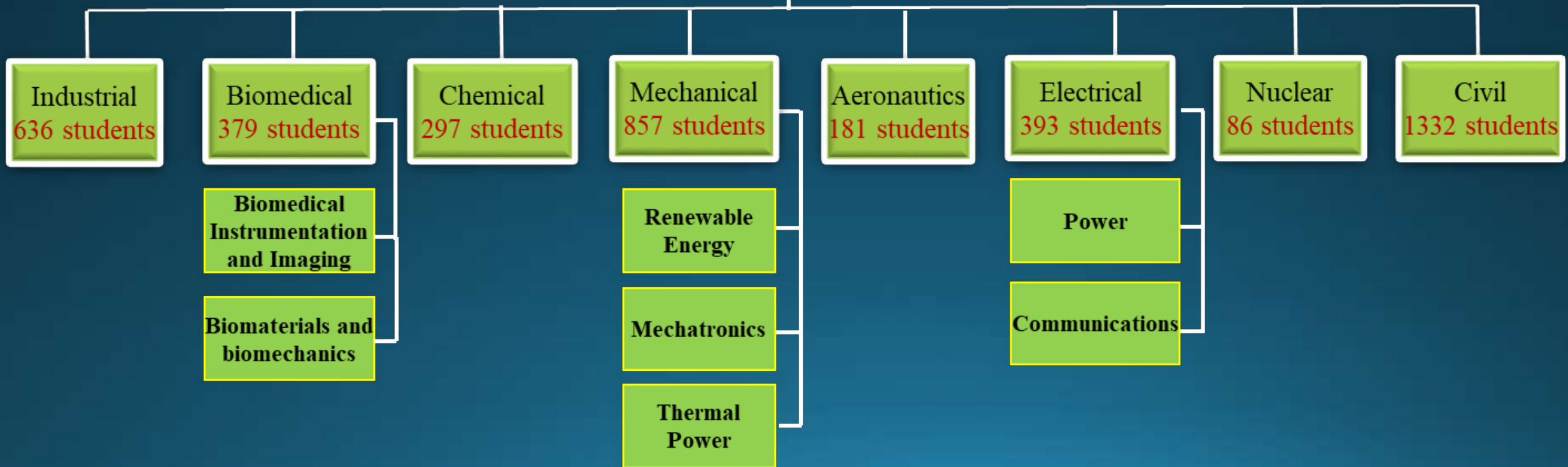- JCIA Accreditation, Joint Commission International

Faculty of Engineering

- ❖ 8 Departments
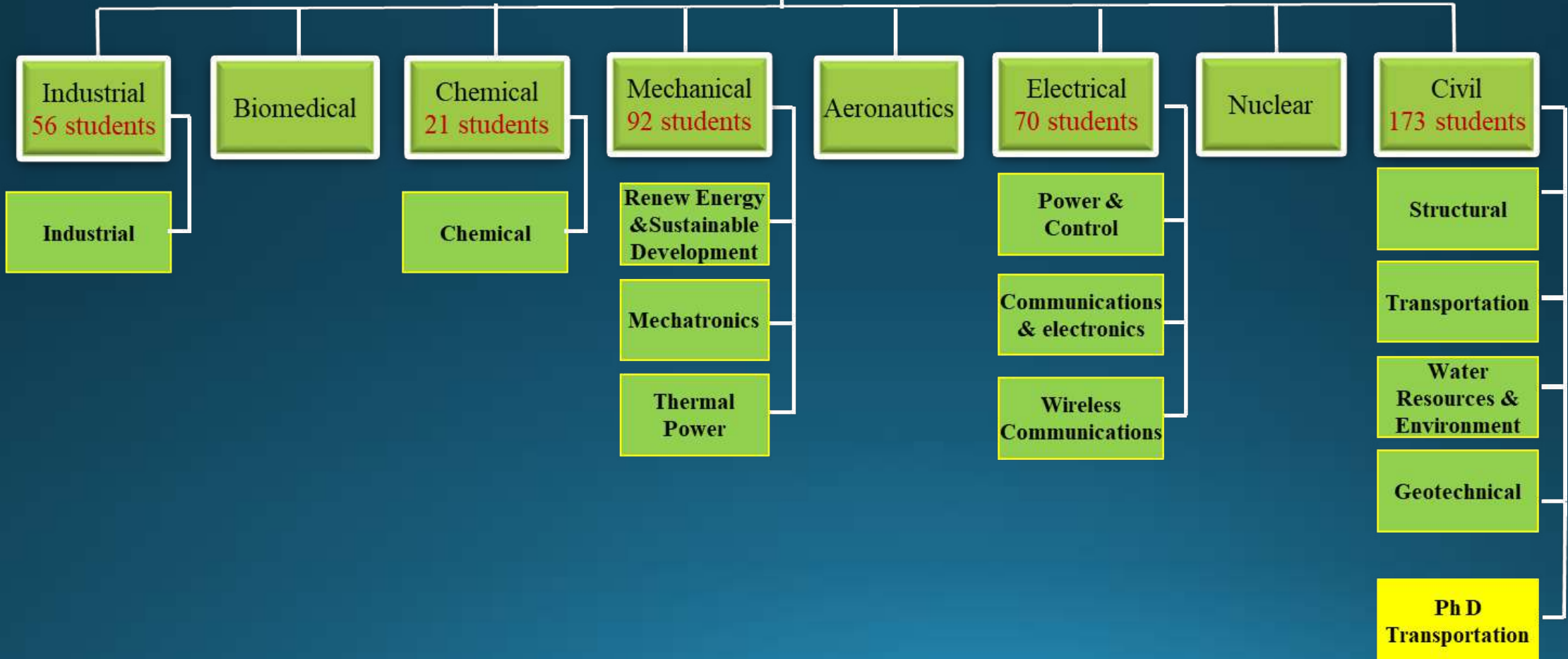- ❖ 18o Faculty members
- ❖ 61 Administrative staff

Electrical

Civil

Nuclear

Mechanical

Industrial

Chemical

Aeronautical

Biomedical

Faculty Programs

Undergraduate

- Industrial
636 students
- Biomedical
379 students
  - Biomedical Instrumentation and Imaging
  - Biomaterials and biomechanics
- Chemical
297 students
- Mechanical
857 students
  - Renewable Energy
  - Mechatronics
  - Thermal Power
- Aeronautics
181 students
- Electrical
393 students
  - Power
  - Communications
- Nuclear
86 students
- Civil
1332 students

Accreditation

Faculty Time line:

❖ The college started ABET Accreditation process in 2007 where 3 undergraduate programs got accredited (CHE, IE & BME)

❖ By 2014, all undergraduate Engineering Programs granted ABET Accreditation

❖ The accreditation period extends tell the end of September 2022.

Faculty participation in Quality Engineering Education

❖ Development of accreditation standards for Jordanian universities.

❖ Accreditation committees for private Jordanian universities.

❖ Conferences & workshops of Accreditation and Quality Assurance on engineering accreditation.

Value of Accreditation

❖ Accredited programs recognized globally

➢ Commitment to quality education

❖ Reliable indication of the value and quality of educational programs

❖ Emphasis on continuous quality improvement

❖ Criteria encourage innovation and promote improvements

Accreditation Process

❖ Starts with defining mission and objectives to meet their constituents' needs

❖ Preparing Outcomes for professional practice (from ABET)

❖ Demonstrate how Programs meet criteria.

❖ Document the Continuous Improvement Process (link objectives to outcomes and assessments upon input from constituencies)

❖ Link Students, faculty, facilities, institutional support, and financial resources to program objectives.

ABET Criteria

1. Students

2. Program Educational Objectives

3. Student Outcomes

4. Continuous Improvement

5. Curriculum

6. Faculty

7. Facilities

8. Institutional Support

Plus, Program Criteria

Student Outcomes (SLO)

a) An ability to apply knowledge of mathematics, science, and engineering

b) An ability to design and conduct experiments, as well as to analyze and interpret data

c) An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability

d) An ability to function on multidisciplinary teams

e) An ability to identify, formulate, and solve engineering problems

f) An understanding of professional and ethical responsibility

g) An ability to communicate effectively

h) The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context

i) A recognition of the need for, and an ability to engage in, lifelong learning

j) A knowledge of contemporary issues

k) An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

Plus any outcomes specific to field of study

JUST Course QA System

❖ Program Level

  ✓ Select the Accreditation System ➔ set SLO s

  ✓ Give a weight for each SLO

  ✓ Distribute weight of each SLO on the program courses (core)

❖ Course Level

  ✓ Define the Course Learning Outcomes (CLO s) and give a weight for each CLO

  ✓ Map the CLO s to the SLO s

JUST Course QA System (cont.)

❖ Course Assessment

  ✓ Choose the proper assessment method to achieve CLO s

  ✓ Map each part of the assessment method with proper CLO

  ✓ Upload all assessment documents to the system

➢ At the end, each course will contribute in achieving the <u>Objectives</u>
   and <u>Outcomes</u> of the whole Program

JUST Course QA System (cont.)

❖ Results

    ✓ Performance of each student per CLO

    ✓ Performance of each student per SLO

    ✓ Summary of performance (Average) for all students per CLO

    ✓ Summary of performance (Average) for all students per SLO

❖ Feedback

    ✓ Recommendations for Improvement on student results (for CLO s below rating)

    ✓ General Reflections on Results

    ✓ Planned improvements/changes for next Semester

Thank You