

***Ministry of Higher Education and Scientific Research***

***Northern Technical University, Department of Civil Technologies***

***Technical Institute / Kirkuk, Computer-Aided Drawing Branch***

***Academic Program Description for the Academic Year 2022-2023***

**(1) Institution:**

Northern Technical University / Technical Institute - Kirkuk

**(2) Academic Department:**

Department of Civil Techniques

**(3) Program Name:**

Computer-Drawing Branch

**(4) Certificate:**

Final Diploma, Equivalent to three academic years, studied over two calendar years

**(5) System:**

Courses

**(6) Other External Factors:**

A close relationship exists between program outcomes and the job market, incorporating market feedback into the curriculum.

**(7) Program Objectives:**

- To produce skilled technicians capable of drafting various engineering plans.
- Manufacture architectural models and mock-ups.
- Execute artistic layouts for project plans.
- Draft structural, electrical, and mechanical plans.
- Utilize computers for the above-mentioned tasks.

### **(8) Expected Learning Outcomes and Teaching Methods:**

- Knowledge and Understanding:
  - Engineering drawing, architectural drawing, structural drawing, architectural rendering, descriptive engineering, sanitary drawing
- Subject-specific Skills:
  - Drawing architectural, structural, sanitary, electrical, and mechanical plans
  - Creating architectural models for civil structures
  - Artistic layout of project plans
  - Computer skills in drawing and web skills

### **(9) Teaching Methods:**

Lectures, drawing rooms, architectural display labs, summer training, field visits, scientific film screenings, workshops, field training

### **(10) Evaluation Methods:**

- 3D model creation
- Daily evaluation
- Daily boards
- Midterm exams
- Final exams

### **(11) General and Transferable Skills:**

- Use of computers in map drawing
- Learning some mechanical works like welding, turning, plumbing, carpentry, etc.

- Civil labs
- Implementation of architectural elements in structural projects

**(12) Personal Development Planning:**

- Seminars
- Lectures
- Development courses
- Student projects
- Scientific visits
- Scientific exhibitions

**(13) Admission Criteria:**

- High school graduation average
- Type of academic branch (Biological, Applied, Vocational Education / Engineering Drawing)
- Physical condition based on medical examination.

**(14) Important Information Sources about the Program:**

- Available resources in the Institute library.
- Resources available in the Institute's online library.
- Resources available in the Ministry of Higher Education and Scientific Research's virtual library.
- Specialized websites on the Internet.