

ELSEWEDY UNIVERSITY OF TECHNOLOGY

**INTRODUCES THE INTERNATIONAL POLYTECHNIC MODEL TO EGYPT,
BRIDGING THE GAP BETWEEN THEORY AND PRACTICE.**

SUTech is the first polytechnic university in Egypt that offers a 4-year bachelor's degree in Irrigation Engineering Technology (B.Tech), in an integrated set of practical and theoretical learning. SUTech is introducing leading international technologies and standards, and preparing Egyptian youth for leadership roles in the local and global markets.

AI IN SMART WATER MANAGEMENT TECHNOLOGY PROGRAM

Blends theory with hands-on training, preparing students to lead in modern water management and sustainable agriculture. Through a rigorous curriculum spanning basic sciences to advanced irrigation technologies, students gain expertise in fluid mechanics, hydrology, and system design.

Emphasizing real-world application, the program includes field training, lab work, and a summer internship. Graduates emerge as skilled professionals equipped to design, manage, and optimize irrigation systems – driving innovation in water resource management and agricultural development.

GRADUATES OF THIS PROGRAM WILL HAVE A CAREER PATH IN



- Irrigation Systems Design Engineer
- Smart Irrigation Systems Developer
- Irrigation Control Systems Programmer
- Research and Development Specialist
- Quality Control Engineer for Irrigation Systems
- Technical Sales Engineer
- Urban Irrigation Systems Designer
- Parks and Recreation Irrigation Manager
- Golf Course Irrigation Specialist
- Water Policy Advisor
- Irrigation Project Manager

ELIGIBILITY *To Apply*

Thanaweya Amma and all equivalent certificates are eligible for SUT - Polytechnic of Egypt (IG - American Diploma - Technical Diploma and more).

CONTACT US

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CALL US ON: 15755
KILO 51, CAIRO-ISMAILIA
DESERT ROAD

Apply Now



In collaboration with



AI SMART WATER MANAGEMENT TECHNOLOGY



SCHOOL OF
ENGINEERING TECHNOLOGY

AI SMART WATER MANAGEMENT TECHNOLOGY

Year 1

EPT111:	Computer Aided Engineering Drawing
CET111:	Introduction to Computer and Programming
GEN111:	Applied Mathematics I
HUM111:	English Language I
HUM121:	Principles of Law, Human Rights & Ethics
IRT102:	Introduction to Water Resources Management
GEN122:	Principles of Physics
GEN211:	Probability & Statistics
GEN131:	Principle of Chemistry & Material Science
HUMUE1:	University Elective I
IRT103:	IRT Internship I

Year 2

IRT201:	Introduction to Soil
IRT203:	Fundamental Surveying Techniques
IRT204:	Wells and Pumps
IRT205:	IRT Project I - Seminar I
EPT202:	Foundation of Electrical Engineering
HUM231:	Presentation Skills and Technical Writing
IRT206:	Groundwater and Surface Water Hydrology
IRT207:	Irrigation Instrumentation
IRT208:	Principles of Irrigation Systems
IRT209:	IRT Project II
CET123:	Foundation of Information Technology

Year 3

Pivot Irrigation Technology Track

IRT301:	Soil and Water Conservation Engineering
IRTC301:	Advanced Irrigation System Design
IRT302:	Water Treatment Reuse
GEN113:	Applied Mathematics II
HUMUE2:	University Elective II
IRTC302:	Center Pivot Irrigation System Design
IRT303:	Agricultural Water Management
IRT304:	Modeling Soil and Water Processes
IRT305:	IRT Internship II
HUM311:	English Language II

Year 3

Irrigated Field Crops Track

IRT301:	Soil and Water Conservation Engineering
IRTC301:	Drainage Engineering
IRT302:	Water Treatment Reuse
GEN113:	Applied Mathematics II
HUMUE2:	University Elective II
IRTC302:	Field Crop Irrigation System Design Fundamentals
IRT303:	Agricultural Water Management
IRT304:	Modeling Soil and Water Processes
IRT305:	IRT Internship II
HUM311:	English Language II

Year 3

Water Management Technology Track

IRT301:	Soil and Water Conservation Engineering
IRTC301:	Irrigation Hydraulics and Conveyance Systems
IRT302:	Water Treatment Reuse
GEN113:	Applied Mathematics II
HUMUE2:	University Elective II
IRTC302:	Water Resource Management System Design
IRT303:	Agricultural Water Management
IRT304:	Modeling Soil and Water Processes
IRT305:	IRT Internship II
HUM311:	English Language II

Year 4

Irrigated Field Crops Track

IRT401:	Design of On-Farm Irrigation Systems
IRTC401:	Advanced Field Crop Irrigation Design
IRT402:	Irrigation Water Quality and Salinity Management
IRT403:	IRT Project III + Seminar
HUM431:	Project Management
HUMUE3:	University Elective III
IRTC402:	Cropping Systems
IRT404:	Water Delivery System
IRT405:	Remote Sensing for Water Management
IRT406:	IRT Project IV
IRT407:	Smart Irrigation Technologies

PROGRAM ELECTIVE Courses

HUM131:	Innovation & Entrepreneurship
HUM133:	Communication & Negotiation Skills
HUM164:	Social Responsibility
HUM132:	Management & Leadership Skills
HUM152:	History of Art & Architecture
HUM151:	History of Engineering & Technology
HUM172:	Scientific Research & Critical Thinking
HUM153:	Italian Language

Year 4

Pivot Irrigation Technology Track

IRT401:	Design of On-Farm Irrigation Systems
IRTC401:	Advanced Pivot Irrigation System Design
IRT402:	Irrigation Water Quality and Salinity Management
IRT403:	IRT Project III + Seminar
HUM431:	Project Management
HUMUE3:	University Elective III
IRTC402:	Environmental Impact of Irrigation
IRT404:	Water Delivery System
IRT405:	Remote Sensing for Water Management
IRT406:	IRT Project IV
IRT407:	Smart Irrigation Technologies

Year 4

Water Management Technology Track

IRT401:	Design of On-Farm Irrigation Systems
IRTC401:	Integrated Water Management System Design
IRT402:	Irrigation Water Quality and Salinity Management
IRT403:	IRT Project III + Seminar
HUM431:	Project Management
HUMUE3:	University Elective III
IRTC402:	Water Policy
IRT404:	Water Delivery System
IRT405:	Remote Sensing for Water Management
IRT406:	IRT Project IV
IRT407:	Smart Irrigation Technologies

HUM154:	German Language
HUM251:	Sustainability for Entrepreneurship
HUM162:	Health and Safety
HUM171:	Sustainability for Employment
HUM114:	The Character of Egypt
HUM113:	Arabic
HUM161:	Safety & Risk Management
HUM163:	Preparing Technical Reports