

New Energy Power Generation Technology Programme Outline

The "New Energy Power Generation Technology" diploma at the Yellow River Conservancy Technical Institute focuses on equipping students with the skills and knowledge for designing, operating, and maintaining renewable energy power plants, particularly those utilizing solar, wind, and water resources. The program emphasizes practical applications, including on-site visits and hands-on experience with different technologies.

KEY AREAS OF STUDY:

Solar Power Generation:

The program analyzes the design and location of solar generation plants, covering various photovoltaic collectors and related components. It also explores solar thermal power plants, including their operation, technologies, and the water resources involved.

Wind Power Generation:

The curriculum likely includes the study of wind turbine technology, installation, and maintenance.

Hydroelectric Power Generation:

The program examines the use of water resources for electricity production, including the selection of turbines, the impact of dams, and the technology behind pumped-storage power plants.

Biomass Power Generation:

The program may also touch on biomass as a renewable energy source.

Other Renewable Energy Technologies: The program may also cover emerging trends and technologies in the field of renewable energy.

Practical Experience:

On-site visits and professional practice:

The program includes practical experiences like site visits and hands-on work with different power generation systems.

School-enterprise training:

The institute has a strong connection with Chinese enterprises in the energy sector, offering opportunities for students to gain real-world experience and potentially work on overseas projects.

Career Opportunities:

The diploma can lead to various career paths, including:

- Solar and wind farm technicians.
- Mechanical and electrical engineering technicians in the renewable energy sector.
- Control and instrumentation technicians.
- System analysts in the renewable energy field.

Program Structure:

- The program is typically a three-year advanced diploma, providing both theoretical and practical knowledge.
- It may involve international collaborations and training programs for foreign students.