

Asia Eastern University of Science and Technology
Department of Materials and Textiles
Materials Applied Technology Section

A. History

Our school is sponsored by the Far East Group in 1968. Far Eastern New Century Co., Ltd. (FENC), a subsidiary of Far Eastern Group, is the largest textile group in Taiwan. Therefor in 1969, the department was established as the Department of Textile Engineering to be a base for cultivating textile professionals, not only for our Group, also for Taiwan's textile industry. After the school was upgraded to an institute as name of Oriental Institute of Technology(OIT) in 2000, the department was renamed as the Department of Materials and Textiles and recruited students for the four-year college. In 2011, the department was divided into three sections, Materials Applied Technology Section, Textiles Clothing Design Section, and Master Degree. In 2021, the school was upgraded to the University of Science and Technology(AEUST).

B. Admission qualification

Graduates of high school students, Graduates of vocational high schools main specialty in Mechanical Engineering and Management.

C. Educational goals

Cultivate professionals with expertise in Textile, Polymer and Material applications. Focus on cultivating innovative talents in functional fabrics and polymer materials for Taiwan textile industry.

D. Course planning:

1.Foundation Course:

Physics, Chemistry and Chemical Experiment, Organic Chemistry and Organic Chemical Experiment, Creative Thinking and Aesthetic Design, Identification and Practice of Textile Properties, Color Planning & Management, Eco.

2.Textiles Application Course:

Fundamental of Fiber Science, Fiber Physical and Chemical Properties, Yarn Engineering and Practice, Fabric Formation and Practice, Woven Design, Knitwear Design, Dyeing Engineering and Practice, Finishing Engineering and Practice, Printing Engineering and Practice.

3.Materials Application Course:

Introduction to Materials Science, Materials Processing and Manufacturing, Application of Advanced Materials, Biomedical Materials, Polymer Science,

Polymer Processing, and Engineering Plastics.

4. Graduation Project:

Graduation thesis/project, Practice of Industrial Internship

E. Facilities

Chemistry Lab, Spinning Factory, Dyeing and Finishing Laboratory, Precision Instrumentation Lab, Computer-Aided Design (CAD) Classroom, Fabric Design Lab, Digital Printing Lab, Coloring & Finishing Lab, Textiles Identification Lab, Functional and Fashionable Textiles R&D Center

F. Display of Learning Results

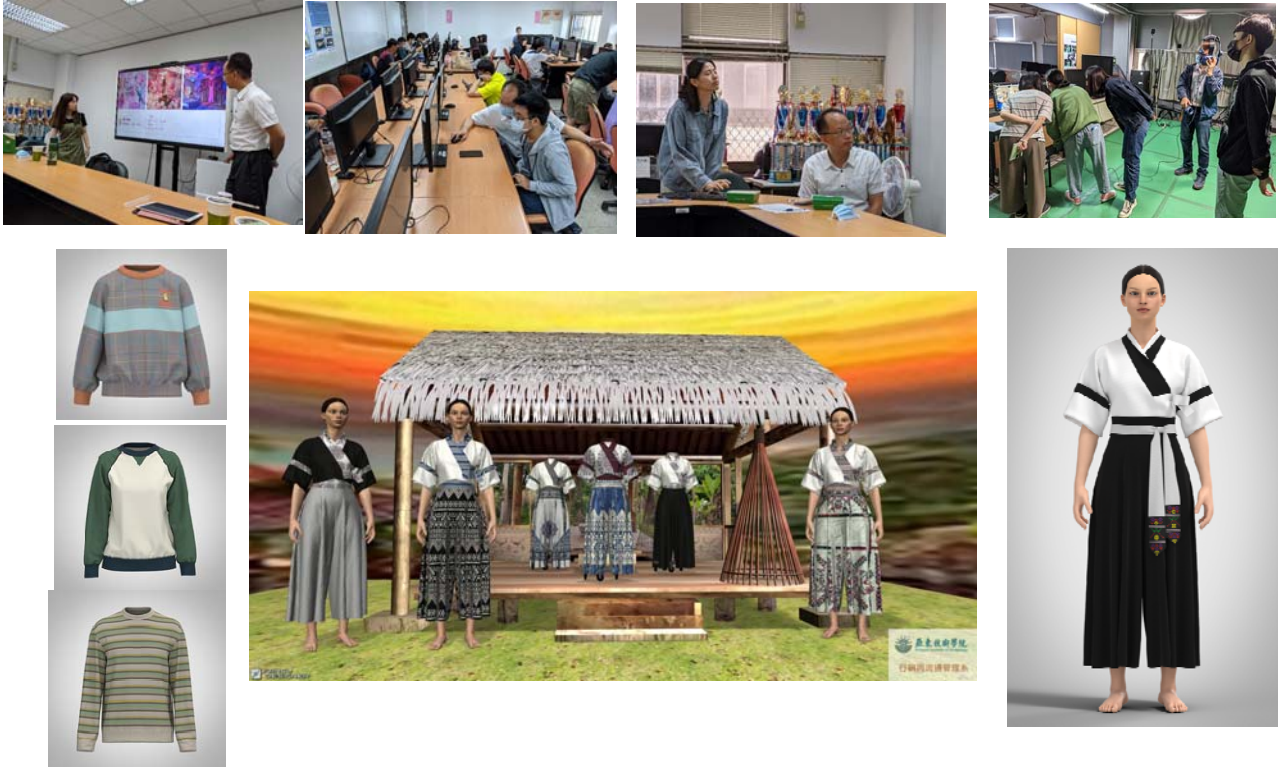
1. Knitting Collaborative Teaching by Industry Teachers



2. Printing Collaborative Teaching by Industry Teachers



3. VR Collaborative Teaching by Industry Teachers



4. Making Equipment



5. Functional Fabrics Testing Training



6. Graduation Thesis Publish



G. Functional and Fashionable Textiles R&D Center

Established in 2018, They are knitwear production line, digital printing production line and functional apparel production line constitute the Center costed 80 million Taiwan dollars. The Center aims to cultivate practical textile and garment professionals in the industry. Set up professional practice courses and training camps required by the industry to cultivate students' professional soft power. Through the diversified and close cooperation of production, learning, and research, we will expand the cultivation of practical talents and technology deepening in textile-related industries, fill in the talent gap in the textile industry year by year, and enhance the competitiveness of the textile industry.

1. Facilities



- Seamless Circular Knitting Machine *3 Set
- Whole Garment Flat Knitting Machine *1 Set
- Shoes Upper Cloth Flat Knitting Machine *2 Set
- Jacquard Sock Knitting Machine *4 Set
- Direct Digital Printer*2 Set
- Heat Transfer Digital Printer*4 Set
- Sewing Machines for Functional Knitted Fabrics*10 Set

Functional Textile Performance Testing Instruments (MMT, Dry Rate Tester. Thermal Effusivity Texting of Fabrics, Automatic Hydrostatic Head Tester. Air Permeability Tester etc.)

2.Activity



H. Off-Campus Internship

In order to improve students' foreign language ability, practical experience, and broaden their international horizons. The school not only cooperates with the parent company's enterprises, but also cooperates with other companies to promote "overseas internships". Every summer, students are sent to Malaysia, Thailand, Vietnam and

mainland China for internships. The Department promotes overseas internships, summer internships, and full-year industrial internships for senior students. Students will be connected to the workplace early, and those who perform well in industrial internships will be given priority in employment by enterprises.

H. Employment and Further Education

1. Employment

Research and development, manufacturing process, business, public works, testing and quality control, textile special examination and customs official work in polymer and textile related industries, etc.

2. Further Education

Textile, Polymer and Materials and other related research for master degree.