

## Curriculum Structure of Advanced Semiconductor Packaging and Testing **【International Program】** (Applicable to students enrolling in September, 2026)

Grade	Courses
Grade 1	<p style="text-align: center;"><b>Students must take 4 courses each semester in the first year</b></p> <ul style="list-style-type: none"> <li>● Structural Design and Process of Electronic Packaging Technology*</li> <li>● Applied Mechanics and Mechanics of Materials*</li> <li>● Materials Science*</li> <li>● Advanced Polymer-Based Electronic Packaging Materials*</li> <li>● Semiconductor Wafer Bonding Technology and Application*</li> <li>● Semiconductor Reliability Engineering*</li> <li>● Application of Laser Micro-Micromachining in Electronic Packaging*</li> <li>● Advanced Semiconductor Lithography Technology*</li> <li>● Introduction of Wide Band Gap Compound Semiconductor Technology*</li> <li>● Surface Characterization of Materials*</li> <li>● Special Issues in Material Design*</li> <li>● Computer Aided Engineering Analyses and Design*</li> <li>● Special Issues in Functional Polymer Materials*</li> <li>● Sensor Theory and Assembly Packaging Technology Application*</li> <li>● Advanced Packaging Process and Heterogeneous Integration Packaging Technology*</li> </ul>
Grade 2	Master's Thesis Research

Note: \* Indicates English-taught courses.

### Eligibility requirements for Master's degree examination:

**At least 24 credits, limited to English-taught courses offered by the Advanced Semiconductor Packaging and Testing Institute, should be completed.**

**Curriculum Structure of Advanced Semiconductor Packaging and Testing 【Domestic Students】  
(Applicable to students enrolling in September, 2026)**

Grade	Semester	Compulsory Courses	Elective Courses
Grade 1	1 <sup>st</sup> Semester	<p align="center"><b>Minimum: 1 course</b></p> <ul style="list-style-type: none"> <li>● Semiconductor Packaging Engineering</li> <li>● Structural Design and Process of Advanced Electronic Packaging Technology*</li> </ul>	<p><b>Minimum: 3 courses in the 1<sup>st</sup> semester and 1 course in the 2<sup>nd</sup> semester.</b></p> <ul style="list-style-type: none"> <li>● Semiconductor Reliability Engineering*</li> <li>● Applied Mechanics and Mechanics of Materials*</li> <li>● Advanced Polymer-Based Electronic Packaging Materials*</li> <li>● Semiconductor Wafer Bonding Technology and Application*</li> <li>● Advanced Semiconductor Lithography Technology*</li> <li>● Application of Laser Micro-Micromachining in Electronic Packaging*</li> <li>● Intelligent Manufacturing and Control Practices</li> <li>● System-Level Static Electricity and Electromagnetic Interference</li> <li>● Materials Science*</li> <li>● Polymer Materials</li> <li>● Product Analysis</li> <li>● Optoelectronics and Devices</li> <li>● Microwave Circuit and System</li> <li>● Sensor Theory and Assembly Packaging Technology Application*</li> <li>● Special Issues in Material Design*</li> <li>● Surface Characterization of Materials*</li> <li>● Computer Aided Engineering Analyses and Design*</li> <li>● Introduction of Wide Band Gap Compound Semiconductor Technology*</li> <li>● Image Recognition</li> <li>● Introduction of Semiconductor Engineering Technology</li> <li>● Advanced packaging process and heterogeneous Integration Packaging Technology*</li> <li>● Special Issues in Functional Polymer Materials*</li> <li>● Organic Semiconductor Materials and Devices</li> <li>● Engineering Statistics and Quality Management</li> <li>● Design and Testing For System Circuit</li> <li>● High-speed And High Frequency Circuit Simulation and Measurement</li> </ul>
	2 <sup>nd</sup> Semester	<ul style="list-style-type: none"> <li>● Experiment on Semiconductor Packaging Processes</li> </ul>	

Note: \* Indicates English-taught courses.

Grade	Semester	Compulsory Courses
Grade 2	1 <sup>st</sup> Semester	● Special Topics & Technical Reports in Advanced Semiconductor Packaging and Testing (I)
	2 <sup>nd</sup> Semester	● Special Topics & Technical Reports in Advanced Semiconductor Packaging and Testing (II)
Grade 3	1 <sup>st</sup> Semester	● Special Topics & Technical Reports in Advanced Semiconductor Packaging and Testing (III)

Program	Grade	Semester	27 Credits of Compulsory Internship Courses for Grad 1 to 3 Students
Internship in the Institute of Advanced Semiconductor Packaging and Testing	Grade 1	2 <sup>nd</sup> Semester	<ul style="list-style-type: none"> <li>● Internship in Basic Introduction to Semiconductor</li> <li>● Internship in Manufacturing of Semiconductor Assembly and Testing</li> </ul>
	Grade 2	1 <sup>st</sup> Semester	<ul style="list-style-type: none"> <li>● Introduction to Statistical Process Control</li> <li>● Professional Courses and Applications (Level 1)–Professional Teaching</li> </ul>
		2 <sup>nd</sup> Semester	<ul style="list-style-type: none"> <li>● Application of Quality Management Core Tools</li> <li>● Professional Courses and Applications (Level 2)–Project Planning and Execution</li> </ul>
		Summer Semester	<ul style="list-style-type: none"> <li>● High-End Electronic Product Practice</li> </ul>
	Grade 3	1 <sup>st</sup> Semester	<ul style="list-style-type: none"> <li>● Project Reporting - Acceptance and Planning (A)</li> <li>● Project Reporting - Acceptance and Planning (B)</li> </ul>