

Course Content

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| Course Title (English) | Microwave Filter Design | |
| Course Title (Chinese) | 微波濾波器設計 | |
| Credit | 3 | |
| Instructor | Prof. Tzong-Ling Wu, 吳宗霖 教授 | |
| Outline | Week | Class Content |
| | 1 | Introduction |
| | 2 | Network Analysis |
| | 3 | Basic Concepts and Theories of Filters |
| | 4 | Basic Concepts and Theories of Filters |
| | 5 | Transmission Lines and Components |
| | 6 | Transmission Lines and Components |
| | 7 | Spring Vacation |
| | 8 | Lowpass and Bandpass Filters |
| | 9 | Lowpass and Bandpass Filters |
| | 10 | Lowpass and Bandpass Filters |
| | 11 | Highpass and Bandstop Filters |
| | 14 | Highpass and Bandstop Filters |
| | 13 | Mid-term Report |
| | Week | Class Content |
| | 14 | Coupled Resonator Circuits |
| | 15 | Coupled Resonator Circuits |
| 16 | Coupled Resonator Circuits | |

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| | 17 | Final Report | |
| | 18 | Final Report | |
| Course Objective | <p>1. To introduce the foundation of microwave filters design.</p> <p>2. To introduce the theories and the implementations of various types of microwave filters.</p> <p>3. Through paper study and report, the course will help students to understand the state-of-the-art technologies in filter design.</p> <p>4. Through the team work, a microwave filter design/realization term project will be conducted to enhance the understanding of the filter theory and application.</p> | | |
| English Teaching | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | | |
| Teaching Material | <input checked="" type="checkbox"/> English <input type="checkbox"/> Chinese | | |