

# 100-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	智慧型控制	Serial No. / ID	1615 / EDR5192
Dept.	電機工程學系博士班	School System / Class	研究所博士班1年1班
Lecturer	吳幸珍	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(一)567 / H371	Language	Chinese

Introduction
<p>This course is divided into two parts. One is to provide senior undergraduates and graduate students to obtain deeper understanding of various modern design technologies in state space. The classical approaches are then combined with optimization technique for real nonlinear physical systems. Part II is to provide students for intelligent modeling and stability-ensured optimal fuzzy control technologies. We emphasize the compensate effect for those approach will bring the better design results.</p>

Outline
<ol style="list-style-type: none"><li>1. Mastering Matlab/Simulink;Physical system finding(IEL) (Oga-1)</li><li>2-3. Sliding Inverted-Wedge System and Linearization</li><li>4. Optimization-compensated root-locus design (Oga-4)</li><li>5. Optimization-compensated LQR design (Oga-7)</li></ol> <p>Quiz</p> <ol style="list-style-type: none"><li>6. Intelligent Control Concept (林俊良-1,11,12,13)</li><li>7. Mastering Matlab/Fuzzy Tool Box</li><li>8. Mamdani modeling (林俊良-14)</li><li>9. Generic intelligent controller(林俊良-14,15)</li><li>10. Final Exam.</li></ol>

Prerequisite
no