

ADDIS ABABA INSTITUTE OF TECHNOLOGY አዲስ አበባ ቴክኖሎጂ ኢንስቲትዱት ADDIS ABABA UNIVERSITY አዲስ አበባ ዩኒቨርሲቲ

Name Dr. Lemma Dendena Tufa (Associate Professor) Emmil Lemma.dendena@aait.edu.et/ lemmatufa@gmail.com Block D, No. 34 0913852022 Consultation Hours Tuesday 10am-12 noon Course Information Cedit Hours Credit Hours 3 Prerequisite Advanced Computational Methods Semester II, March 2020 Course Learning At the end of the course, students should be able to: Outcomes(CLO) 1. Design and Analyze feedback control systems 2. Design and Analyze feedback control systems 3. 3. Analyze open-loop and closed-loop characteristics of multivariable systems 4. Design multi-loop controllers with decouplers for multivariable systems 5. Supposis The course starts with introduction of the strengths and weaknesses of the classical feedback control systems, gradually setting up the scenario for the need of advanced control systems. The performance of specific design of control systems will be assessed using simulation software, like Matlab and/or Hysis. Assessment The course strats with introduction of strengths and final exam: Course work 6 Final Exam 20% 7 Feet .20% 8 Signments .50% 1.1 Process	Lecturer's Information	
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9. Multi-loop Control Systems		
 Pairing Controlled and Manipulated Variables 		
 Interaction 		
 Decoupling and Decoupler Design 		



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