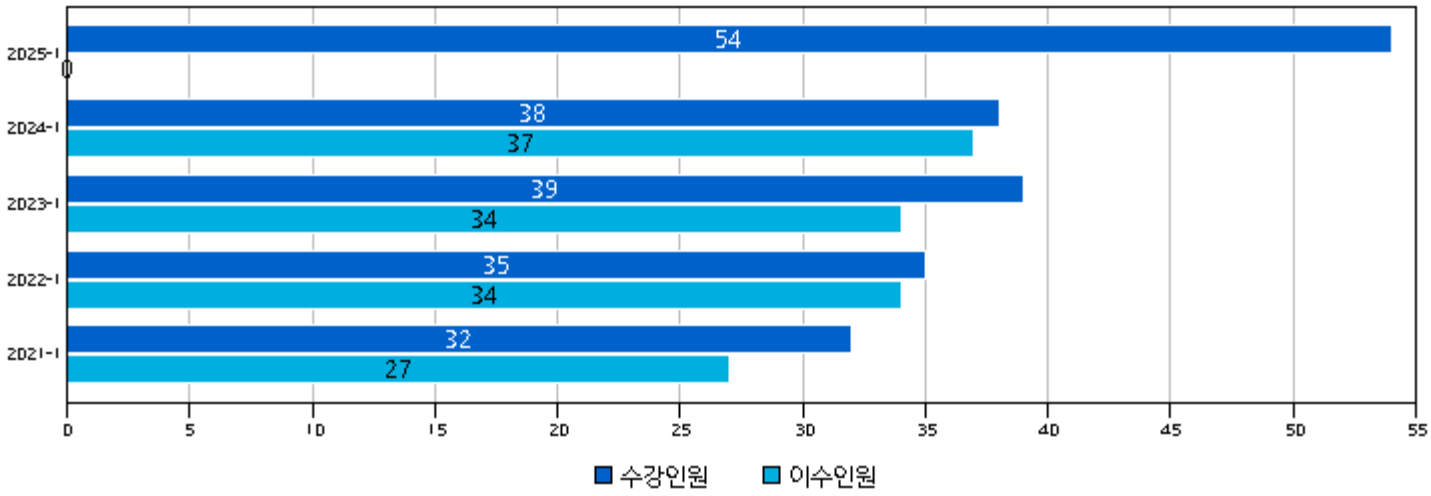
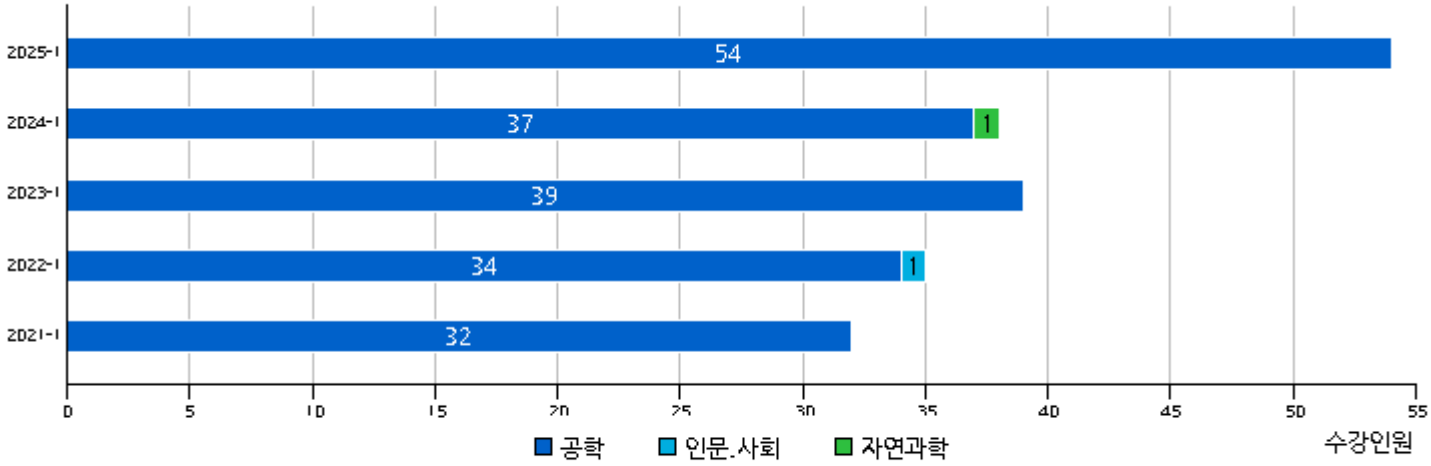
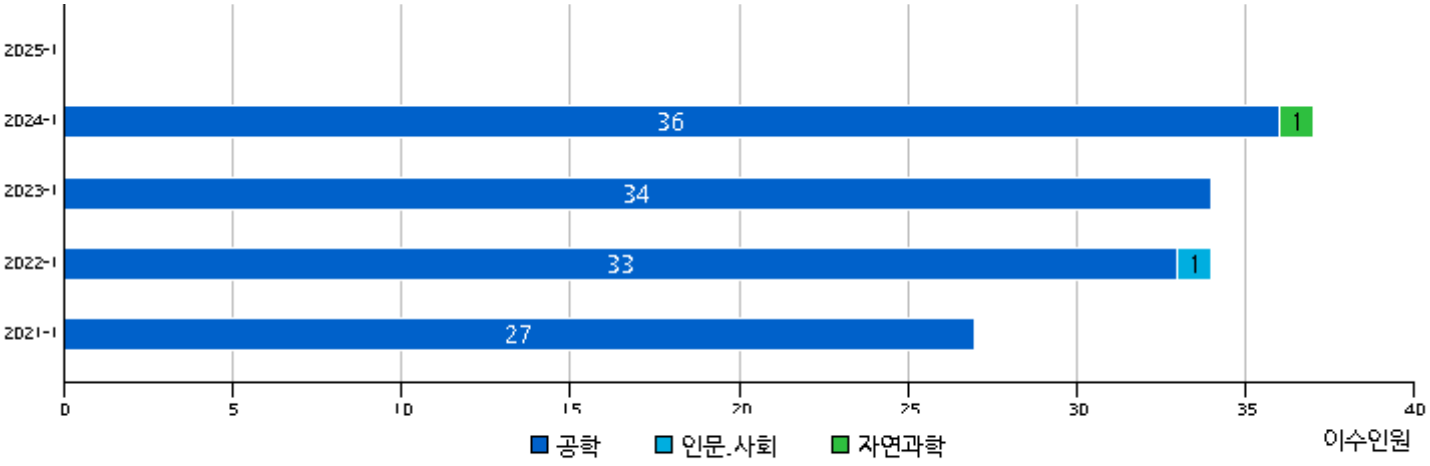
교과목 포트폴리오 (ELE3079 제어시스템개론)

1. 교과목 수강인원





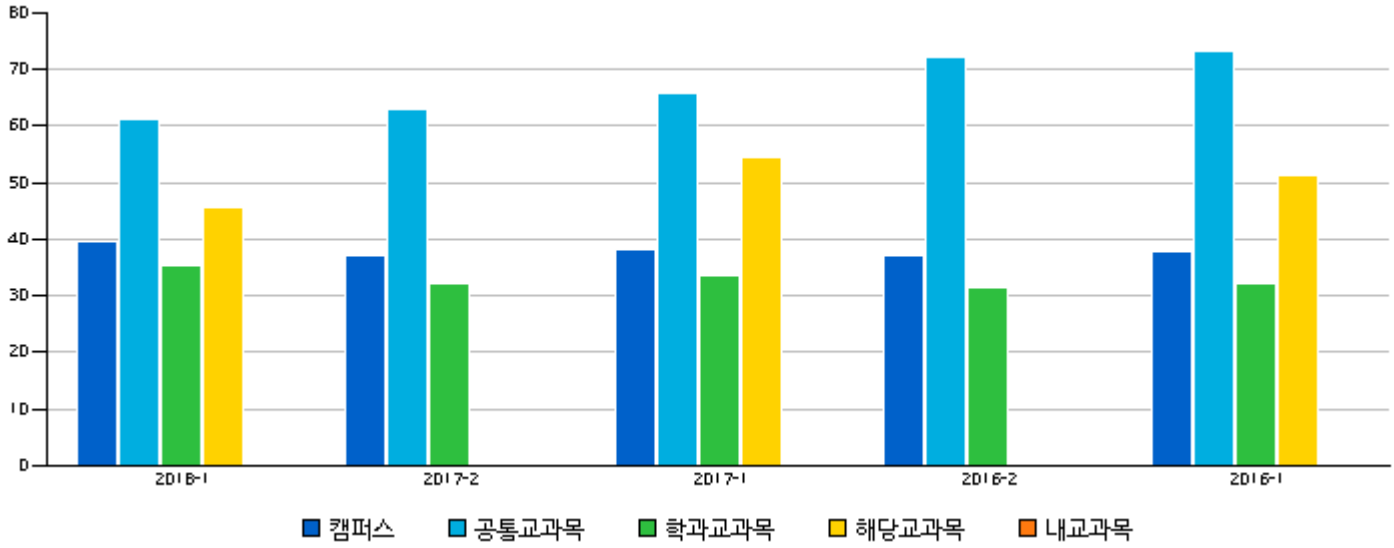


교과목 포트폴리오 (ELE3079 제어시스템개론)

수업년도	수업학기	계열구분	수강인원	이수인원
2021	1	공학	32	27
2022	1	인문.사회	1	1
2022	1	공학	34	33
2023	1	공학	39	34
2024	1	자연과학	1	1
2024	1	공학	37	36
2025	1	공학	54	0

교과목 포트폴리오 (ELE3079 제어시스템개론)

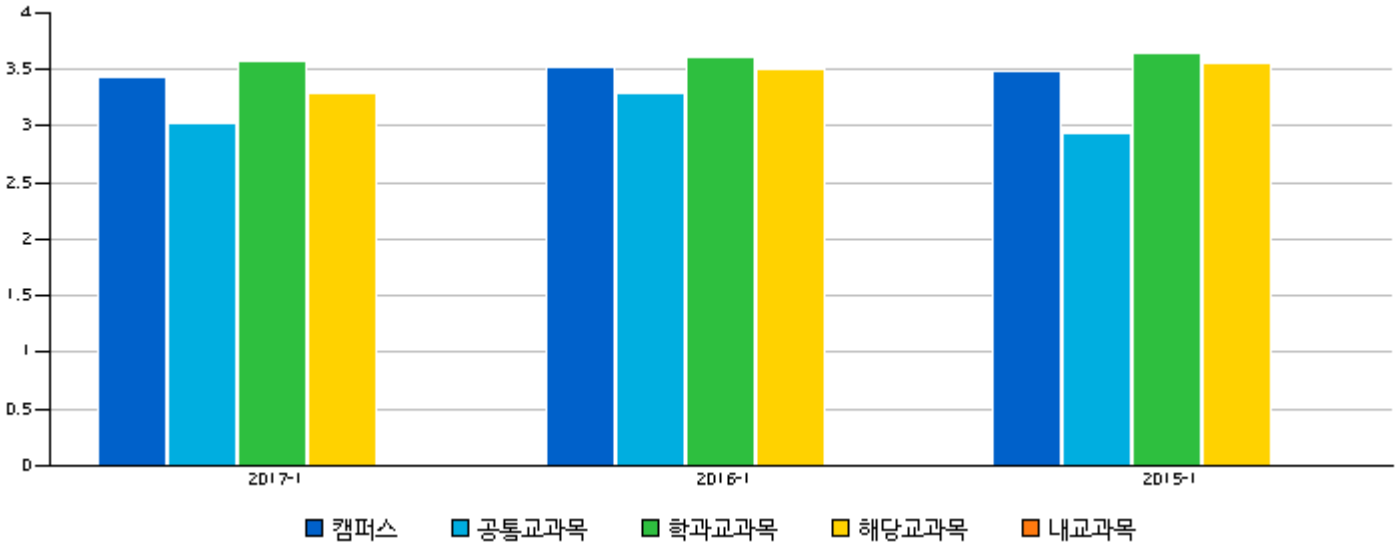
2. 평균 수강인원



수업년도	수업학기	캠퍼스	공통교과목	학과교과목	해당교과목	내교과목
2018	1	39.54	61.09	35.36	45.5	
2017	2	37.26	63.09	32.32		
2017	1	38.26	65.82	33.5	54.5	
2016	2	37.24	72.07	31.53		
2016	1	37.88	73.25	32.17	51.5	

교과목 포트폴리오 (ELE3079 제어시스템개론)

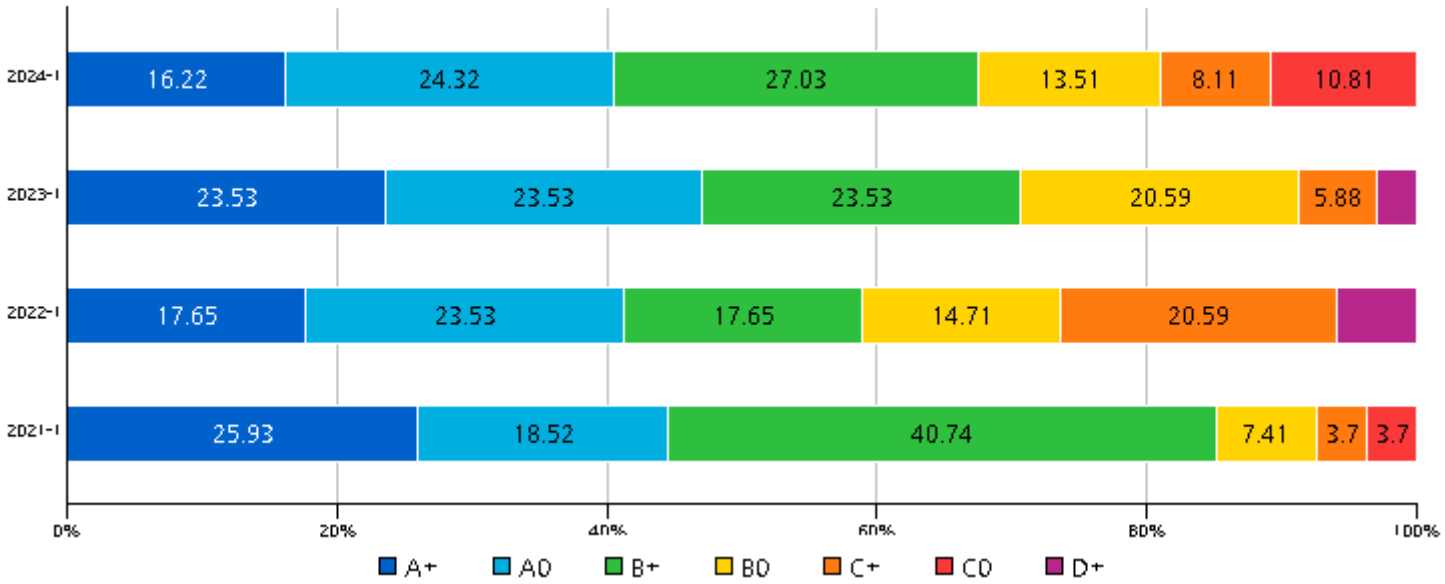
3. 성적부여현황(평점)



수업년도	수업학기	캠퍼스	공통교과목	학과교과목	해당교과목	내교과목
2017	1	3.44	3.02	3.58	3.3	
2016	1	3.52	3.29	3.61	3.5	
2015	1	3.49	2.94	3.64	3.55	

교과목 포트폴리오 (ELE3079 제어시스템개론)

4. 성적부여현황(등급)

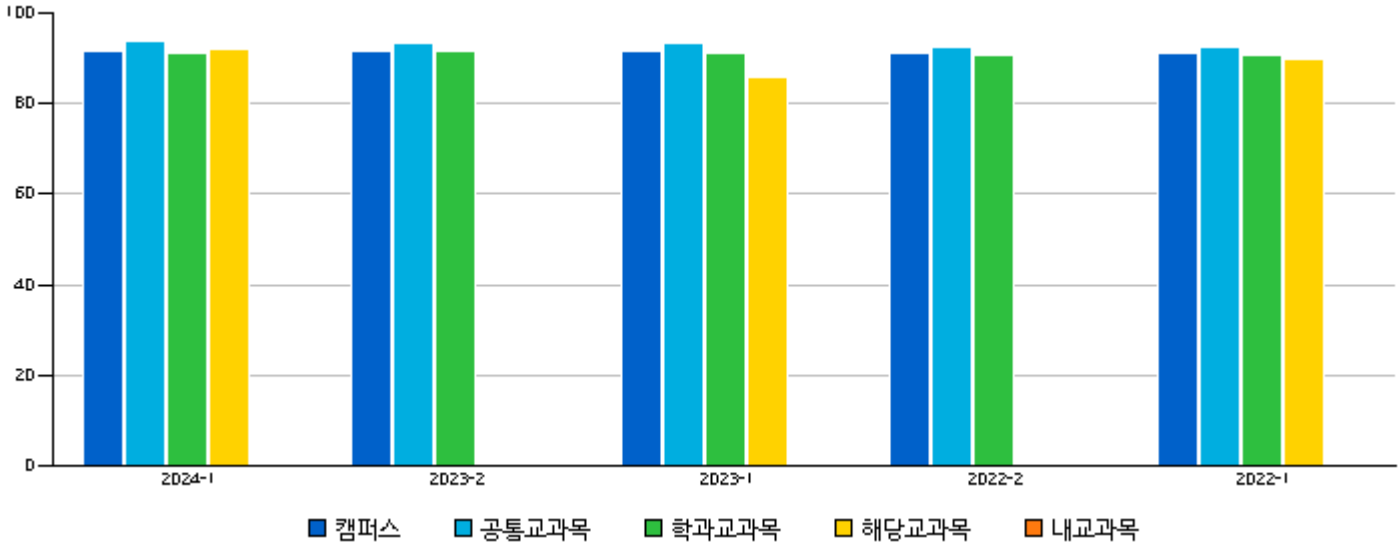


수업년도	수업학기	등급	인원	비율
2021	1	A+	7	25.93
2021	1	A0	5	18.52
2021	1	B+	11	40.74
2021	1	B0	2	7.41
2021	1	C+	1	3.7
2021	1	C0	1	3.7
2022	1	A+	6	17.65
2022	1	A0	8	23.53
2022	1	B+	6	17.65
2022	1	B0	5	14.71
2022	1	C+	7	20.59
2022	1	D+	2	5.88
2023	1	A+	8	23.53
2023	1	A0	8	23.53
2023	1	B+	8	23.53
2023	1	B0	7	20.59
2023	1	C+	2	5.88
2023	1	D+	1	2.94
2024	1	A+	6	16.22
2024	1	A0	9	24.32

수업년도	수업학기	등급	인원	비율
2024	1	B+	10	27.03
2024	1	B0	5	13.51
2024	1	C+	3	8.11
2024	1	C0	4	10.81

교과목 포트폴리오 (ELE3079 제어시스템개론)

5. 강의평가점수



수업년도	수업학기	캠퍼스	공통교과목	학과교과목	해당교과목	내교과목
2024	1	91.5	93.79	91.1	92	
2023	2	91.8	93.15	91.56		
2023	1	91.47	93.45	91.13	86	
2022	2	90.98	92.48	90.7		
2022	1	90.98	92.29	90.75	90	

교과목 포트폴리오 (ELE3079 제어시스템개론)

6. 강의평가 문항별 현황

번호	평가문항	본인평균 (가중치적용)	소속학과,대학평균과의 차이 (+초과,-:미달)				점수별 인원분포				
							매우 그렇치않다	그렇치않다	보통이다	그렇다	매우 그렇다
	교강사:	5점 미만	학과		대학		1점	2점	3점	4점	5점
			차이	평균	차이	평균					
No data have been found.											

7. 개설학과 현황

학과	2025/1	2024/1	2023/1	2022/1	2021/1
융합전자공학부	1강좌(3학점)	1강좌(3학점)	1강좌(3학점)	1강좌(3학점)	1강좌(3학점)

8. 강좌유형별 현황

강좌유형	2021/1	2022/1	2023/1	2024/1	2025/1
일반	1강좌(32)	1강좌(35)	1강좌(39)	1강좌(38)	1강좌(54)

9. 교과목개요

교육과정	관장학과	국문개요	영문개요	수업목표
학부 2024 - 2027 교육과정	서울 공과대학 융합전자공학부	제어시스템의 해석 및 설계에 관한 과목으로 주요 내용은 system modeling, state space representation, and modern design principles 등이다. 구체적으로 Introduction to applied linear algebra and linear dynamical systems, with applications to circuits, signal processing, communications, and control systems, Theory of continuous-time/discrete-time linear time-invariant systems, Laplace and Z-Transforms, Eigenvalues, eigenvectors, and dynamical interpretation, Matrix exponential, stability, and asymptotic behavior, Matrix exponential and its relationship to time response, and Controllability and observability, Transfer function and state space models for control system analysis and synthesis, Pole locations and relationship to time	This course is about the analysis and design of control systems with emphasis on system modeling, state space representation, and modern design principles: More specifically, Introduction to applied linear algebra and linear dynamical systems, with applications to circuits, signal processing, communications, and control systems, Theory of continuous-time/discrete-time linear time-invariant systems, Laplace and Z-Transforms, Eigenvalues and eigenvectors and dynamical interpretation, Matrix exponential, stability, and asymptotic behavior, Matrix exponential and its relationship to time response, Controllability and observability, Transfer function and state space models for system analysis and synthesis, Pole	◎ 수강생은 본 수업을 통해 제어시스템의 개념, 이론을 학습하고 시스템의 안전성을 이론적으로 증명할 수 있다. ◎ 수강생은 제어시스템을 수학적으로 모델링하고, 제어기를 설계할 수 있으며 이를 python을 이용하여 구현하고, 그 성능을 이론적으로 검증할 수 있다.

교과목 포트폴리오 (ELE3079 제어시스템개론)

교육과정	관장학과	국문개요	영문개요	수업목표
		response, Root locus methods, Feedback, Review of single-input single-output (SISO) analysis and control methods in the frequency domain, SISO analysis and control using state space models를 다룬다. Matlab program을 이용하여 simulation 실습을 한다.	locations and relationship to time response, Root locus methods, Feedback, Review of single-input single-output (SISO) analysis and control methods in the frequency domain, and SISO analysis and control using state space models. Computer simulation using Matlab.	
학부 2020 - 2023 교육과정	서울 공과대학 융합전자공학부	제어시스템의 해석 및 설계에 관한 과목으로 주요 내용은 system modeling, state space representation, and modern design principles 등이다. 구체적으로 Introduction to applied linear algebra and linear dynamical systems, with applications to circuits, signal processing, communications, and control systems, Theory of continuous-time/discrete-time linear time-invariant systems, Laplace and Z-Transforms, Eigenvalues, eigenvectors, and dynamical interpretation, Matrix exponential, stability, and asymptotic behavior, Matrix exponential and its relationship to time response, and Controllability and observability, Transfer function and state space models for control system analysis and synthesis, Pole locations and relationship to time response, Root locus methods, Feedback, Review of single-input single-output (SISO) analysis and control methods in the frequency domain, SISO analysis and control using state space models를 다룬다. Matlab program을 이용하여 simulation 실습을 한다.	This course is about the analysis and design of control systems with emphasis on system modeling, state space representation, and modern design principles: More specifically, Introduction to applied linear algebra and linear dynamical systems, with applications to circuits, signal processing, communications, and control systems, Theory of continuous-time/discrete-time linear time-invariant systems, Laplace and Z-Transforms, Eigenvalues and eigenvectors and dynamical interpretation, Matrix exponential, stability, and asymptotic behavior, Matrix exponential and its relationship to time response, Controllability and observability, Transfer function and state space models for system analysis and synthesis, Pole locations and relationship to time response, Root locus methods, Feedback, Review of single-input single-output (SISO) analysis and control methods in the frequency domain, and SISO analysis and control using state space models. Computer simulation using Matlab.	◎ 수강생은 본 수업을 통해 제어시스템의 개념, 이론을 학습하고 시스템의 안전성을 이론적으로 증명할 수 있다. ◎ 수강생은 제어시스템을 수학적으로 모델링하고, 제어기를 설계할 수 있으며 이를 python을 이용하여 구현하고, 그 성능을 이론적으로 검증할 수 있다.
학부 2016 - 2019 교육과정	서울 공과대학 융합전자공학부	제어시스템의 해석 및 설계에 관한 과목으로 주요 내용은 system modeling, state space representation, and modern design principles 등이다. 구체적으로 Introduction to applied linear algebra and linear dynamical systems, with applications to circuits, signal processing, communications, and control systems, Theory of continuous-time/discrete-time linear time-invariant systems, Laplace and Z-Transforms, Eigenvalues, eigenvectors, and dynamical interpretation, Matrix exponential, stability, and asymptotic behavior, Matrix exponential and its relationship to time response, and Controllability and observability, Transfer function and state space models for control system analysis and synthesis, Pole locations and relationship to time response, Root locus methods, Feedback, Review of single-input single-output (SISO) analysis and control methods in the	This course is about the analysis and design of control systems with emphasis on system modeling, state space representation, and modern design principles: More specifically, Introduction to applied linear algebra and linear dynamical systems, with applications to circuits, signal processing, communications, and control systems, Theory of continuous-time/discrete-time linear time-invariant systems, Laplace and Z-Transforms, Eigenvalues and eigenvectors and dynamical interpretation, Matrix exponential, stability, and asymptotic behavior, Matrix exponential and its relationship to time response, Controllability and observability, Transfer function and state space models for system analysis and synthesis, Pole locations and relationship to time response, Root locus methods, Feedback, Review of single-input single-output	

교과목 포트폴리오 (ELE3079 제어시스템개론)

교육과정	관장학과	국문개요	영문개요	수업목표
		frequency domain, SISO analysis and control using state space models를 다룬다. Matlab program을 이용하여 simulation 실습을 한다.	(SISO) analysis and control methods in the frequency domain, and SISO analysis and control using state space models. Computer simulation using Matlab.	
학부 2013 - 2015 교육과정	서울 공과대학 융합전자공학부	제어시스템의 해석 및 설계에 관한 과목으로 주요 내용은 system modeling, state space representation, and modern design principles 등이다. 구체적으로 Introduction to applied linear algebra and linear dynamical systems, with applications to circuits, signal processing, communications, and control systems, Theory of continuous-time/discrete-time linear time-invariant systems, Laplace and Z-Transforms, Eigenvalues, eigenvectors, and dynamical interpretation, Matrix exponential, stability, and asymptotic behavior, Matrix exponential and its relationship to time response, and Controllability and observability, Transfer function and state space models for control system analysis and synthesis, Pole locations and relationship to time response, Root locus methods, Feedback, Review of single-input single-output (SISO) analysis and control methods in the frequency domain, SISO analysis and control using state space models를 다룬다. Matlab program을 이용하여 simulation 실습을 한다.	This course is about the analysis and design of control systems with emphasis on system modeling, state space representation, and modern design principles: More specifically, Introduction to applied linear algebra and linear dynamical systems, with applications to circuits, signal processing, communications, and control systems, Theory of continuous-time/discrete-time linear time-invariant systems, Laplace and Z-Transforms, Eigenvalues and eigenvectors and dynamical interpretation, Matrix exponential, stability, and asymptotic behavior, Matrix exponential and its relationship to time response, Controllability and observability, Transfer function and state space models for system analysis and synthesis, Pole locations and relationship to time response, Root locus methods, Feedback, Review of single-input single-output (SISO) analysis and control methods in the frequency domain, and SISO analysis and control using state space models. Computer simulation using Matlab.	
학부 2009 - 2012 교육과정	서울 공과대학 융합전자공학부	제어시스템의 해석 및 설계에 관한 과목으로 주요 내용은 system modeling, state space representation, and modern design principles 등이다. 구체적으로 Introduction to applied linear algebra and linear dynamical systems, with applications to circuits, signal processing, communications, and control systems, Theory of continuous-time/discrete-time linear time-invariant systems, Laplace and Z-Transforms, Eigenvalues, eigenvectors, and dynamical interpretation, Matrix exponential, stability, and asymptotic behavior, Matrix exponential and its relationship to time response, and Controllability and observability, Transfer function and state space models for control system analysis and synthesis, Pole locations and relationship to time response, Root locus methods, Feedback, Review of single-input single-output (SISO) analysis and control methods in the frequency domain, SISO analysis and control using state space models를 다룬다. Matlab program을 이용하여 simulation 실습	This course is about the analysis and design of control systems with emphasis on system modeling, state space representation, and modern design principles: More specifically, Introduction to applied linear algebra and linear dynamical systems, with applications to circuits, signal processing, communications, and control systems, Theory of continuous-time/discrete-time linear time-invariant systems, Laplace and Z-Transforms, Eigenvalues and eigenvectors and dynamical interpretation, Matrix exponential, stability, and asymptotic behavior, Matrix exponential and its relationship to time response, Controllability and observability, Transfer function and state space models for system analysis and synthesis, Pole locations and relationship to time response, Root locus methods, Feedback, Review of single-input single-output (SISO) analysis and control methods in the frequency domain, and SISO analysis and control using state space models.	

교과목 포트폴리오 (ELE3079 제어시스템개론)

교육과정	관장학과	국문개요	영문개요	수업목표
		을 한다.	Computer simulation using Matlab.	

10. CQI 등록내역

No data have been found.