

Figure 1.4. Mapping of Program Outcomes into the Old Aerospace Engineering Curriculum

Program Outcomes	Core Courses												
	ENGR 100	ENGR 101	math 115	math 116	math 215	math 216	phs 100	phs 141	phs 240	phs 241	chem 125	chem 130	
an ability to apply knowledge of mathematics in engineering													
an ability to design and conduct experiments, analyze and interpret data													
an ability to design a system, component, or process to meet specified needs													
an ability to function on multidisciplinary teams													
an ability to identify, formulate and solve engineering problems													
an understanding of professional and ethical responsibilities													
an ability to communicate effectively													
the broad education necessary to understand the impact of engineering solutions in a global/societal context													
recognition of the need for and an ability to engage in lifelong learning													
knowledge of contemporary issues													
an ability to use the techniques, skills, and engineering tools necessary for engineering practice													

XX: *strong relationship (significant focus in this area)*

X: *modest relationship (minimal focus in this area)*

Figure 1.4 (Continued)

	Aerospace Engineering Courses												
Program Outcomes	E 200	E 301	E 302	E 314	E 320	E 330	E 340	E 420	E 430	E 471	E 44X	E 481	E 483
an ability to apply knowledge of mathematics in engineering													
an ability to design and conduct experiments, analyze and interpret data													
an ability to design a system, component, or process to meet specified needs													
an ability to function on multidisciplinary teams													
an ability to identify, formulate and solve problems													
an understanding of professional and ethical responsibilities													
an ability to communicate effectively													
the broad education necessary to understand engineering solutions in a global/societal context													
recognition of the need for and an ability to engage in lifelong learning													
knowledge of contemporary issues													
an ability to use the techniques, skills, and engineering tools necessary for engineering practice													
A knowledge of aerodynamics, aerospace structures, aircraft and rocket propulsion, flight mechanics, aircraft stability and control, attitude determination and control													
Competence in the integration of aerospace engineering topics and their application in aerospace design													

Figure 1.5. Mapping of Program Outcomes into the New Aerospace Engineering Curriculum

Program Outcomes	Core Courses												
	ENGR 100	ENGR 101	math 115	math 116	math 215	math 216	sys 100	sys 141	sys 240	sys 241	chem 125	chem 130	
an ability to apply knowledge of mathematics in engineering													
an ability to design and conduct experiments, analyze and interpret data													
an ability to design a system, component, or process to meet specified needs													
an ability to function on multidisciplinary teams													
an ability to identify, formulate and solve problems													
an understanding of professional and ethical responsibilities													
an ability to communicate effectively													
the broad education necessary to understand engineering solutions in a global/societal context													
recognition of the need for and an ability to engage in lifelong learning													
knowledge of contemporary issues													
an ability to use the techniques, skills, and engineering tools necessary for engineering practice													

XX: *strong relationship (significant focus in this area)*

X: *modest relationship (minimal focus in this area)*

Figure 1.5 (Continued)

	Aerospace Engineering Courses												
Program Outcomes	E 225	E 245	E 285	E 305	E 306	E 315	E 325	E 335	E 345	E 385	E 386	E 481	E 483
an ability to apply knowledge of mathematics in engineering													
an ability to design and conduct experiments, analyze and interpret data													
an ability to design a system, component, or process to meet specified needs													
an ability to function on multidisciplinary teams													
an ability to identify, formulate and solve engineering problems													
an understanding of professional and ethical responsibilities and an ability to communicate effectively													
the broad education necessary to understand the role of engineering in a global/societal context													
recognition of the need for and an ability to engage in continuing learning													
knowledge of contemporary issues													
an ability to use the techniques, skills, and engineering tools necessary for engineering practice													
A knowledge of aerodynamics, aerospace structures, aircraft and rocket propulsion, flight mechanics, aircraft stability and control, attitude determination and control													
Competence in the integration of aerospace engineering topics and their application in aerospace design													