



NATIONAL ENGINEERING STANDARDS

- A. An ability to apply knowledge of mathematics, science and engineering
- B. An ability to design and conduct experiments, as well as to interpret data
- C. An ability to design a system, component, or component to meet desired needs
- D. An ability to function on multi-disciplinary teams
- E. An ability to identify, formulate and solve engineering problems
- F. An understanding of professional and ethical responsibility
- G. An ability to communicate effectively
- H. The broad education necessary to understand the impact of engineering in global and social contexts
- I. A recognition of the need for and an ability to engage in life-long learning
- J. A knowledge of contemporary issues
- K. An ability to use the techniques, skills and modern engineering tools necessary for engineering practice



NATIONAL ENGINEERING STANDARDS												
Standard	Event	A	B	C	D	E	F	G	H	I	J	K
A. An ability to apply knowledge of mathematics, science and engineering	1. Agriculture and Biotechnology Design	X	X	X	X	X	X	X	X		X	
	2. Animatronics		X		X	X	X		X			X
	3. Architectural Model	X	X	X	X	X	X	X	X	X	X	X
	4. Career Comparisons	X	X				X	X			X	
B. An ability to design and conduct experiments, as well as to interpret data	5. Chapter Team (Written and Oral)								X	X		
	6. CAD, Architecture with Animation	X		X				X				
C. An ability to design a system, component, or component to meet desired needs	7. CAD, Engineering with Animation	X		X				X				
	8. Construction Systems	X			X		X	X				
D. An ability to function on multi-disciplinary teams	9. Cyberspace Pursuit			X	X			X				
	10. Debating Technological Issues							X	X	X	X	
E. An ability to identify, formulate and solve engineering problems	11. Desktop Publishing			X				X				
	12. Dragster Design	X	X	X		X	X	X				X
F. An understanding of professional and ethical responsibility	13. Electronic Game Design			X	X		X	X		X		
	14. Electronic Research and Experimentation	X	X	X		X			X		X	X
G. An ability to communicate effectively	15. Engineering Design	X	X	X	X	X	X	X	X	X	X	X
	16. Essays on Technology	X	X	X	X	X	X	X	X	X		
H. The broad education necessary to understand the impact of engineering in global and social contexts	17. Extemporaneous Presentation						X	X	X			
	18. Fashion Design				X				X			
I. A recognition of the need for and an ability to engage in life-long learning	19. Film						X	X		X		
	20. Flight Endurance	X	X	X		X	X	X		X		X
J. A knowledge of contemporary issues	21. Future Technology Teacher	X		X			X	X			X	
	22. Imaging Technology	X	X	X	X	X	X	X	X	X	X	X
K. An ability to use the techniques, skills and modern engineering tools necessary for engineering practice.	23. Manufacturing Prototype	X	X	X	X	X	X	X	X			
	24. Medical Technology	X	X	X	X	X	X	X	X	X	X	X
A. An ability to apply knowledge of mathematics, science and engineering	25. Music Production					X		X				
	26. On Demand Video				X		X	X				
B. An ability to design and conduct experiments, as well as to interpret data	27. Prepared Presentation							X	X	X		
	28. Promotional Graphics	X						X				
C. An ability to design a system, component, or component to meet desired needs	29. Radio Controlled Transportation	X	X	X	X	X						X
	30. SciViz		X		X			X			X	X
D. An ability to function on multi-disciplinary teams	31. Structural Engineering	X	X	X	X	X		X				X
	32. System Control Technology	X	X	X	X	X	X	X	X	X	X	X
E. An ability to identify, formulate and solve engineering problems	33. Technical Sketching and Application					X	X	X				
	34. Technology Bowl (Written and Oral)	X	X	X		X			X		X	X
F. An understanding of professional and ethical responsibility	35. Technology Dare	X	X	X	X	X						X
	36. Technology Problem Solving	X		X								
G. An ability to communicate effectively	37. Transportation Modeling	X	X	X		X	X	X				X