

Browse **Quality Core Curriculum Standards by subject****Subject: Technology Education****Grade: 9-12**Course: 21.43100 Communication Technology

- 1** **Topic:** Basic Skills
Standard: Locate, understand, and interpret written information in a variety of formats, including such documents as manuals, graphs, reports, and schedules.
- 2** **Topic:** Basic Skills
Standard: Communicate thoughts, ideas, information, and messages in writing and technologically create documents such as letters, directions, manuals, reports, graphs, and flowcharts.
- 3** **Topic:** Basic Skills
Standard: Perform and apply numerical concepts and calculations, and solve problems by choosing appropriately from a variety of mathematical techniques using mental, manual, and technological methods.
- 4** **Topic:** Basic Skills
Standard: Receive, interpret, and respond to verbal and nonverbal messages in a manner appropriate to a given situation.
- 5** **Topic:** Basic Skills
Standard: Organize ideas and communicate orally in a clear, concise, and courteous manner.
- 6** **Topic:** Thinking Skills
Standard: Specify goals, objectives, constraints, and supporting factors.
- 7** **Topic:** Thinking Skills
Standard: Identify problems, alternative solutions, and consequences of alternative solutions, and use appropriate techniques to resolve given problems.
- 8** **Topic:** Thinking Skills
Standard: Implement a plan of action making modifications as needed to achieve stated objectives.
- 9** **Topic:** Thinking Skills
Standard: Use effective learning techniques to acquire and apply new knowledge and skills.
- 10** **Topic:** Personal Qualities
Standard: Assess self accurately, set personal goals, monitor progress, and exhibit self-control.
- 11** **Topic:** Personal Qualities
Standard: Choose ethical courses of action.
- 12** **Topic:** Personal Qualities
Standard: Take initiative to accomplish tasks in a timely manner.
- 13** **Topic:** Personal Qualities
Standard: Exert a high level of effort and persevere towards goal attainment.
- 14** **Topic:** Personal Qualities
Standard: Demonstrate adaptability, dependability, responsibility, and such social behaviors as tolerance, honesty, empathy, and courtesy.
- 15** **Topic:** Interpersonal Skills
Standard: Participate and interact as a team member and leader.

- 16** **Topic:** Interpersonal Skills
Standard: Share knowledge and skills with others.
- 17** **Topic:** Interpersonal Skills
Standard: Perform effectively in various environments with people of different ages, genders, cultures, socioeconomic backgrounds, attitudes, and abilities.
- 18** **Topic:** Interpersonal Skills
Standard: Work to satisfy customer/client expectations.
- 19** **Topic:** Interpersonal Skills
Standard: Use strategies appropriate to a given situation to prevent and resolve conflicts.
- 20** **Topic:** Resources
Standard: Select goal-relevant activities, prioritize them, manage time, and prepare and follow schedules.
- 21** **Topic:** Resources
Standard: Use or prepare budgets, make projections, keep records, and make adjustments to meet objectives.
- 22** **Topic:** Resources
Standard: Acquire, store, allocate, and use materials and space efficiently.
- 23** **Topic:** Technology
Standard: Prevent, identify, or solve problems with technical or electronic equipment.
- 24** **Topic:** Technology
Standard: Operate and maintain technical equipment and the work environment safely following applicable industry regulations and guidelines.
- 25** **Topic:** Technology
Standard: Utilize a variety of technologies.
- 26** **Topic:** Business Aspects
Standard: Demonstrate understanding of basic economic concepts and how they are applied in business functions and activities.
- 27** **Topic:** Business Aspects
Standard: Identify forms of business ownership.
- 28** **Topic:** Business Aspects
Standard: Demonstrate understanding of the scope of a business, its place within an industry, and the interrelationship of its parts.
- 29** **Topic:** Business Aspects
Standard: Demonstrate understanding of the individual’s role, responsibilities, and relationships in the organizational structure of a business.
- 30** **Topic:** Business Aspects
Standard: Maintain safety, health, and environmental standards, and address ergonomic concerns.
- 31** **Topic:** Career Development
Standard: Make potential career decisions based upon interests, abilities, and values, and formulate appropriate plans to reach career goals.
- 32** **Topic:** Career Development
Standard: Demonstrate understanding of the relationship between educational achievement and career planning and how career choices impact family patterns and lifestyle.
- 33** **Topic:** Career Development
Standard: Demonstrate effective skills for seeking and securing employment.
- 34** **Topic:** Career Development
Standard: Demonstrate understanding of education and career development as a lifelong learning process that requires

preparation for change.

- 35** **Topic:** Select and Use the Proper Communication Technology to Meet Practical Objectives
Standard: Apply communication technology to individual or community problems.
- 36** **Topic:** Select and Use the Proper Communication Technology to Meet Practical Objectives
Standard: Describe the factors that affect the use and interpretation of communication products and services.
- 37** **Topic:** Select and Use the Proper Communication Technology to Meet Practical Objectives
Standard: Identify and describe the roles of communication in business and industry, such as informing, persuading, and educating.
- 38** **Topic:** Select and Use the Proper Communication Technology to Meet Practical Objectives
Standard: Distinguish between photographic, digital graphic, printed graphic, technical graphic, audio, video, electronic, and multimedia communication systems.
- 39** **Topic:** Design Communication Products Using Appropriate Communication Design Processes and Techniques
Standard: Describe the design processes and techniques in communication.
- 40** **Topic:** Design Communication Products Using Appropriate Communication Design Processes and Techniques
Standard: Use the problem solving process to develop or improve communication products that meet specified needs.
- 41** **Topic:** Design Communication Products Using Appropriate Communication Design Processes and Techniques
Standard: Identify areas where quality can be designed into communication products, services, or systems.
- 42** **Topic:** Describe Quality and How it is Measured in Communications
Standard: Describe and apply different quality control applications.
- 43** **Topic:** Describe Quality and How it is Measured in Communications
Standard: Apply continuous quality improvement techniques to the production of communication products and services.
- 44** **Topic:** Work Safely with Communication Tools, Equipment, Machines, and Materials
Standard: Master relevant safety tests.
- 45** **Topic:** Work Safely with Communication Tools, Equipment, Machines, and Materials
Standard: Follow safety manuals, instructions, and requirements.
- 46** **Topic:** Work Safely with Communication Tools, Equipment, Machines, and Materials
Standard: Identify and classify hazardous materials and wastes.
- 47** **Topic:** Work Safely with Communication Tools, Equipment, Machines, and Materials
Standard: Dispose of hazardous materials and wastes appropriately.
- 48** **Topic:** Produce Communication Items Using the Appropriate Tools, Equipment, Machines, Materials, and Technical Processes
Standard: Describe the chemical and physical properties of communication materials.
- 49** **Topic:** Produce Communication Items Using the Appropriate Tools, Equipment, Machines, Materials, and Technical Processes
Standard: Describe the processes used in photographic, digital graphic, printed graphic, technical graphic, audio, and video communication systems.
- 50** **Topic:** Produce Communication Items Using the Appropriate Tools, Equipment, Machines, Materials, and Technical Processes
Standard: Use a variety of tools, equipment, machines, computers, simulations, and materials to produce communication products and services.
- 51** **Topic:** Describe the Importance of Maintenance in Communications
Standard: Handle and store tools and materials correctly.
- 52** **Topic:** Describe the Importance of Maintenance in Communications
Standard: Locate and perform manufacturers' maintenance procedures on selected tools, equipment, and machines.
- 53** **Topic:** Describe the Importance of Maintenance in Communications

Standard: Describe the results of negligent or improper maintenance.

- 54** **Topic:** Apply the Appropriate Codes, Laws, Standards, or Regulations Related to Communication Technology, Such as Occupational Safety and Health Administration (OSHA), National Electrical Code(NEC), American Society for Testing Materials (ASTM), Standard Symbols, and National CAD Standards
Standard: Describe the importance of codes, laws, standards, or regulations.
- 55** **Topic:** Apply the Appropriate Codes, Laws, Standards, or Regulations Related to Communication Technology, Such as Occupational Safety and Health Administration (OSHA), National Electrical Code(NEC), American Society for Testing Materials (ASTM), Standard Symbols, and National CAD Standards
Standard: Identify areas where codes, laws, standards, or regulations may be required.
- 56** **Topic:** Apply the Appropriate Codes, Laws, Standards, or Regulations Related to Communication Technology, Such as Occupational Safety and Health Administration (OSHA), National Electrical Code(NEC), American Society for Testing Materials (ASTM), Standard Symbols, and National CAD Standards
Standard: Follow the appropriate codes, laws, standards, or regulations.
- 57** **Topic:** Apply Communication, Mathematics, and Science Knowledge and Skills to Communication Activities
Standard: Use audio and visual communication techniques consistent with industry standards.
- 58** **Topic:** Apply Communication, Mathematics, and Science Knowledge and Skills to Communication Activities
Standard: Use mathematics concepts/formulas in communication technology.
- 59** **Topic:** Apply Communication, Mathematics, and Science Knowledge and Skills to Communication Activities
Standard: Identify and apply science principles used in communication technology.
- 60** **Topic:** Apply Communication, Mathematics, and Science Knowledge and Skills to Communication Activities
Standard: Use the appropriate units of measure.
- 61** **Topic:** Solve Problems, Think Critically, and Make Decisions Related to Communications
Standard: Develop or improve a product by following a problem-solving strategy.
- 62** **Topic:** Solve Problems, Think Critically, and Make Decisions Related to Communications
Standard: Apply critical-thinking strategies to the analysis and evaluation of proposed technological solutions.
- 63** **Topic:** Solve Problems, Think Critically, and Make Decisions Related to Communications
Standard: Apply decision-making techniques to the selection of technological solutions.
- 64** **Topic:** Describe Basic Product and Service Marketing Processes and Techniques
Standard: Prepare a marketing plan for a idea, product, or service.
- 65** **Topic:** Describe Basic Product and Service Marketing Processes and Techniques
Standard: Discuss the effect of customer satisfaction on the image of a product or company.
- 66** **Topic:** Manage a Communication Technology Project
Standard: Develop a plan for completing a communication technology project.
- 67** **Topic:** Manage a Communication Technology Project
Standard: Participate in the organization, operation, and completion of a real or simulated communication project.
- 68** **Topic:** Identify the Factors That Influence the Cost of Producing Communication Goods and Services
Standard: Develop a budget for a communication product or project.
- 69** **Topic:** Identify the Factors That Influence the Cost of Producing Communication Goods and Services
Standard: Determine the most effective strategies to minimize costs.
- 70** **Topic:** Identify the Factors That Influence the Cost of Producing Communication Goods and Services
Standard: Identify the financial factors associated with starting and operating communication enterprises.
- 71** **Topic:** Identify the Factors That Influence the Cost of Producing Communication Goods and Services
Standard: Explain the role of business in a free enterprise system.
- 72** **Topic:** Describe the Importance of Teamwork, Leadership, Integrity, Honesty, Work Habits, and Organizational Skills

Standard: Describe how teams function.

- 73** **Topic:** Describe the Importance of Teamwork, Leadership, Integrity, Honesty, Work Habits, and Organizational Skills
Standard: Use teamwork to solve problems.
- 74** **Topic:** Describe the Importance of Teamwork, Leadership, Integrity, Honesty, Work Habits, and Organizational Skills
Standard: Distinguish between the roles of team leaders and team members.
- 75** **Topic:** Describe the Importance of Teamwork, Leadership, Integrity, Honesty, Work Habits, and Organizational Skills
Standard: Identify characteristics of good leaders.
- 76** **Topic:** Describe the Importance of Teamwork, Leadership, Integrity, Honesty, Work Habits, and Organizational Skills
Standard: Identify employers' expectations and appropriate work habits.
- 77** **Topic:** Describe the Importance of Teamwork, Leadership, Integrity, Honesty, Work Habits, and Organizational Skills
Standard: Define discrimination, harassment, and equality.
- 78** **Topic:** Describe the Importance of Teamwork, Leadership, Integrity, Honesty, Work Habits, and Organizational Skills
Standard: Use time and motion study techniques to develop and maintain work schedules and meet deadlines.
- 79** **Topic:** Describe the Importance of Teamwork, Leadership, Integrity, Honesty, Work Habits, and Organizational Skills
Standard: Complete his/her work according to established criteria.
- 80** **Topic:** Describe the Importance of Teamwork, Leadership, Integrity, Honesty, Work Habits, and Organizational Skills
Standard: Use course experiences to participate in Technology Student Association or similar activities as a leader, a manager, or a team member.
- 81** **Topic:** Investigate Career Opportunities, Requirements, and Expectations in Communication Technology
Standard: Identify an area of interest in communication and investigate its entry-level and advancement requirements and its growth potential.
- 82** **Topic:** Investigate Career Opportunities, Requirements, and Expectations in Communication Technology
Standard: Describe the careers available in communication technology.
- 83** **Topic:** Investigate Career Opportunities, Requirements, and Expectations in Communication Technology
Standard: Describe and discuss factors that affect the adoption or rejection of communication technology related to career choice areas.
- 84** **Topic:** Investigate Career Opportunities, Requirements, and Expectations in Communication Technology
Standard: Discuss the international effects of communication technology and how they affect business and industry.

Course: 21.47100 Pre-Engineering Technology

- 1** **Topic:** Basic Skills
Standard: Locate, understand, and interpret written information in a variety of formats, including such documents as manuals, graphs, reports, and schedules.
- 2** **Topic:** Basic Skills
Standard: Communicate thoughts, ideas, information, and messages in writing and technologically create documents such as letters, directions, manuals, reports, graphs, and flowcharts.
- 3** **Topic:** Basic Skills
Standard: Perform and apply numerical concepts and calculations, and solve problems by choosing appropriately from a variety of mathematical techniques using mental, manual, and technological methods.
- 4** **Topic:** Basic Skills
Standard: Receive, interpret, and respond to verbal and nonverbal messages in a manner appropriate to a given situation.
- 5** **Topic:** Basic Skills
Standard: Organize ideas and communicate orally in a clear, concise, and courteous manner.

- 6** **Topic:** Thinking Skills
Standard: Specify goals, objectives, constraints, and supporting factors.
- 7** **Topic:** Thinking Skills
Standard: Identify problems, alternative solutions, and consequences of alternative solutions, and use appropriate techniques to resolve given problems.
- 8** **Topic:** Thinking Skills
Standard: Implement a plan of action making modifications as needed to achieve stated objectives.
- 9** **Topic:** Thinking Skills
Standard: Use effective learning techniques to acquire and apply new knowledge and skills.
- 10** **Topic:** Personal Qualities
Standard: Assess self accurately, set personal goals, monitor progress, and exhibit self-control.
- 11** **Topic:** Personal Qualities
Standard: Choose ethical courses of action.
- 12** **Topic:** Personal Qualities
Standard: Take initiative to accomplish tasks in a timely manner.
- 13** **Topic:** Personal Qualities
Standard: Exert a high level of effort and persevere towards goal attainment.
- 14** **Topic:** Personal Qualities
Standard: Demonstrate adaptability, dependability, responsibility, and such social behaviors as tolerance, honesty, empathy, and courtesy.
- 15** **Topic:** Interpersonal Skills
Standard: Participate and interact as a team member and leader.
- 16** **Topic:** Interpersonal Skills
Standard: Share knowledge and skills with others.
- 17** **Topic:** Interpersonal Skills
Standard: Perform effectively in various environments with people of different ages, genders, cultures, socioeconomic backgrounds, attitudes, and abilities.
- 18** **Topic:** Interpersonal Skills
Standard: Work to satisfy customer/client expectations.
- 19** **Topic:** Interpersonal Skills
Standard: Use strategies appropriate to a given situation to prevent and resolve conflicts.
- 20** **Topic:** Resources
Standard: Select goal-relevant activities, prioritize them, manage time, and prepare and follow schedules.
- 21** **Topic:** Resources
Standard: Use or prepare budgets, make projections, keep records, and make adjustments to meet objectives.
- 22** **Topic:** Resources
Standard: Acquire, store, allocate, and use materials and space efficiently.
- 23** **Topic:** Technology
Standard: Prevent, identify, or solve problems with technical or electronic equipment.
- 24** **Topic:** Technology
Standard: Operate and maintain technical equipment and the work environment safely following applicable industry regulations and guidelines.
- 25** **Topic:** Technology

Standard: Utilize a variety of technologies.

26

Topic: Business Aspects

Standard: Demonstrate understanding of basic economic concepts and how they are applied in business functions and activities.

27

Topic: Business Aspects

Standard: Identify forms of business ownership.

28

Topic: Business Aspects

Standard: Demonstrate understanding of the scope of a business, its place within an industry, and the interrelationship of its parts.

29

Topic: Business Aspects

Standard: Demonstrate understanding of the individual's role, responsibilities, and relationships in the organizational structure of a business.

30

Topic: Business Aspects

Standard: Maintain safety, health, and environmental standards, and address ergonomic concerns.

31

Topic: Career Development

Standard: Make potential career decisions based upon interests, abilities, and values, and formulate appropriate plans to reach career goals.

32

Topic: Career Development

Standard: Demonstrate understanding of the relationship between educational achievement and career planning and how career choices impact family patterns and lifestyle.

33

Topic: Career Development

Standard: Demonstrate effective skills for seeking and securing employment.

34

Topic: Career Development

Standard: Demonstrate understanding of education and career development as a lifelong learning process that requires preparation for change.

35

Topic: Select and Use the Proper Engineering Technology to Meet Practical Objectives

Standard: Distinguish between engineering, science, and technology.

36

Topic: Select and Use the Proper Engineering Technology to Meet Practical Objectives

Standard: Use mechanical, fluid, thermal and electrical system principles and concepts to solve engineering problems.

37

Topic: Select and Use the Proper Engineering Technology to Meet Practical Objectives

Standard: Use tools, machines, calculators, and computers necessary for obtaining solutions to design problems.

38

Topic: Select and Use the Proper Engineering Technology to Meet Practical Objectives

Standard: Use computers for simulation.

39

Topic: Select and Use the Proper Engineering Technology to Meet Practical Objectives

Standard: Use tools and laboratory equipment for testing and evaluation.

40

Topic: Select and Use the Proper Engineering Technology to Meet Practical Objectives

Standard: Use precision measuring instruments.

41

Topic: Design Products or Systems Using Appropriate Design Processes and Techniques

Standard: Improve a product or system that meets a specified need.

42

Topic: Design Products or Systems Using Appropriate Design Processes and Techniques

Standard: Identify areas where quality, reliability, and safety can be designed into a product or system.

43

Topic: Design Products or Systems Using Appropriate Design Processes and Techniques

Standard: Interpret and produce engineering drawings using standard technical communication techniques.

44

Topic: Design Products or Systems Using Appropriate Design Processes and Techniques

Standard: Describe patents and the patenting process.

- 45** **Topic:** Describe Quality and How it is Measured in Engineering
Standard: Identify different quality control applications in engineering.
- 46** **Topic:** Describe Quality and How it is Measured in Engineering
Standard: Describe how customers perceive the quality of products and services and how they affect engineering decisions.
- 47** **Topic:** Practice Safe Work Habits
Standard: Master relevant safety tests.
- 48** **Topic:** Practice Safe Work Habits
Standard: Follow safety manuals, instructions, and requirements.
- 49** **Topic:** Practice Safe Work Habits
Standard: Identify and classify hazardous materials and wastes.
- 50** **Topic:** Practice Safe Work Habits
Standard: Dispose of hazardous materials and wastes appropriately.
- 51** **Topic:** Build Products or Systems Using the Appropriate Tools, Equipment, Machines, Materials, and Technical Processes
Standard: Identify the chemical, mechanical, and physical properties of engineering materials.
- 52** **Topic:** Build Products or Systems Using the Appropriate Tools, Equipment, Machines, Materials, and Technical Processes
Standard: Conduct lab tests, list causes of failure in material, identify procedures to prevent such failures, and use a computer to prepare a written report on the findings.
- 53** **Topic:** Build Products or Systems Using the Appropriate Tools, Equipment, Machines, Materials, and Technical Processes
Standard: Identify and describe the processes needed to complete a project.
- 54** **Topic:** Build Products or Systems Using the Appropriate Tools, Equipment, Machines, Materials, and Technical Processes
Standard: Use a variety of tools, equipment, machines, and materials.
- 55** **Topic:** Build Products or Systems Using the Appropriate Tools, Equipment, Machines, Materials, and Technical Processes
Standard: Design and produce an item.
- 56** **Topic:** Describe the Importance of Maintenance
Standard: Perform basic maintenance on selected tools, equipment, and machines.
- 57** **Topic:** Describe the Importance of Maintenance
Standard: Handle and store tools and materials correctly.
- 58** **Topic:** Describe the Importance of Maintenance
Standard: Describe the results of negligent or improper maintenance.
- 59** **Topic:** Apply the Appropriate Codes, Laws, Standards, or Regulations Related to Communication Technology, Such as Occupational Safety and Health Administration (OSHA), National Electrical Code(NEC), American Society for Testing Materials (ASTM), Standard Symbols, and National CAD Standards
Standard: Describe the importance of codes, laws, standards, or regulations.
- 60** **Topic:** Apply the Appropriate Codes, Laws, Standards, or Regulations Related to Communication Technology, Such as Occupational Safety and Health Administration (OSHA), National Electrical Code(NEC), American Society for Testing Materials (ASTM), Standard Symbols, and National CAD Standards
Standard: Identify areas where codes, laws, standards, or regulations may be required.
- 61** **Topic:** Apply the Appropriate Codes, Laws, Standards, or Regulations Related to Communication Technology, Such as Occupational Safety and Health Administration (OSHA), National Electrical Code(NEC), American Society for Testing Materials (ASTM), Standard Symbols, and National CAD Standards
Standard: Follow the appropriate codes, laws, standards, or regulations.
- 62** **Topic:** Apply His/Her Communication, Mathematics, and Science Knowledge and Skills to Engineering Activities
Standard: Use written, verbal, and visual communication techniques consistent with industry standards.

- 63** **Topic:** Apply His/Her Communication, Mathematics, and Science Knowledge and Skills to Engineering Activities
Standard: Locate relevant information needed to solve problems.
- 64** **Topic:** Apply His/Her Communication, Mathematics, and Science Knowledge and Skills to Engineering Activities
Standard: Use mathematics concepts/formulas to solve engineering problems.
- 65** **Topic:** Apply His/Her Communication, Mathematics, and Science Knowledge and Skills to Engineering Activities
Standard: Identify and apply science principles used to solve problems.
- 66** **Topic:** Apply His/Her Communication, Mathematics, and Science Knowledge and Skills to Engineering Activities
Standard: Use the appropriate units of measure.
- 67** **Topic:** Solve Problems, Think Critically, and Make Decisions Related to Engineering
Standard: Function as an engineer or technologist in problem solving activities.
- 68** **Topic:** Solve Problems, Think Critically, and Make Decisions Related to Engineering
Standard: Apply critical-thinking strategies to the analysis and evaluation of proposed solutions.
- 69** **Topic:** Solve Problems, Think Critically, and Make Decisions Related to Engineering
Standard: Apply decision-making techniques to engineering problems and solutions.
- 70** **Topic:** Describe the Relationship Between Engineering and Marketing
Standard: Prepare a marketing plan for an idea, product, or service.
- 71** **Topic:** Describe the Relationship Between Engineering and Marketing
Standard: Discuss the effect of customer satisfaction on the image of a product or company.
- 72** **Topic:** Describe the Relationship Between Engineering and Marketing
Standard: Describe how customer demands influence the design of an object.
- 73** **Topic:** Manage an Engineering Project
Standard: Develop a plan for completing an individual project.
- 74** **Topic:** Manage an Engineering Project
Standard: Participate in the organization, operation, and completion of a real or simulated engineering project.
- 75** **Topic:** Identify the Factors That Influence the Cost of an Item or Service
Standard: Work on a budget for a project.
- 76** **Topic:** Identify the Factors That Influence the Cost of an Item or Service
Standard: Determine the most effective strategies to minimize costs.
- 77** **Topic:** Describe the Importance of Teamwork, Leadership, Integrity, Honesty, Work Habits, and Organizational Skills of the Engineering Design Team
Standard: Describe how teams function.
- 78** **Topic:** Describe the Importance of Teamwork, Leadership, Integrity, Honesty, Work Habits, and Organizational Skills of the Engineering Design Team
Standard: Use teamwork to solve problems.
- 79** **Topic:** Describe the Importance of Teamwork, Leadership, Integrity, Honesty, Work Habits, and Organizational Skills of the Engineering Design Team
Standard: Distinguish between the roles of team leaders and team members.
- 80** **Topic:** Describe the Importance of Teamwork, Leadership, Integrity, Honesty, Work Habits, and Organizational Skills of the Engineering Design Team
Standard: Identify characteristics of good leaders.
- 81** **Topic:** Describe the Importance of Teamwork, Leadership, Integrity, Honesty, Work Habits, and Organizational Skills of the Engineering Design Team
Standard: Identify employers' expectations and appropriate work habits.
- 82** **Topic:** Describe the Importance of Teamwork, Leadership, Integrity, Honesty, Work Habits, and Organizational Skills of the

Engineering Design Team

Standard: Define discrimination, harassment, and equality.

- 83** **Topic:** Describe the Importance of Teamwork, Leadership, Integrity, Honesty, Work Habits, and Organizational Skills of the Engineering Design Team
Standard: Use time management techniques to develop and maintain work schedules and meet deadlines.
- 84** **Topic:** Describe the Importance of Teamwork, Leadership, Integrity, Honesty, Work Habits, and Organizational Skills of the Engineering Design Team
Standard: Complete his/her work according to established criteria.
- 85** **Topic:** Describe the Importance of Teamwork, Leadership, Integrity, Honesty, Work Habits, and Organizational Skills of the Engineering Design Team
Standard: Use course experiences to participate in Technology Student Association or similar activities as a leader, a manager, or a team member.
- 86** **Topic:** Select and Report on Career Opportunities, Requirements, and Expectations in Engineering and Technology
Standard: Describe the principle fields for specialization in engineering.
- 87** **Topic:** Select and Report on Career Opportunities, Requirements, and Expectations in Engineering and Technology
Standard: Identify an area of interest.
- 88** **Topic:** Select and Report on Career Opportunities, Requirements, and Expectations in Engineering and Technology
Standard: Investigate its entry-level and advancement requirements and growth potential.
- 89** **Topic:** Select and Report on Career Opportunities, Requirements, and Expectations in Engineering and Technology
Standard: Summarize the characteristics of professional engineers.
- 90** **Topic:** Select and Report on Career Opportunities, Requirements, and Expectations in Engineering and Technology
Standard: Identify the procedures for becoming a registered engineer.

Course: Technology Education: Core Skills

- 1** **Topic:** Basic Skills
Standard: Locate, understand, and interpret written information in a variety of formats, including such documents as manuals, graphs, reports, and schedules.
- 2** **Topic:** Basic Skills
Standard: Communicate thoughts, ideas, information, and messages in writing and technologically create documents such as letters, directions, manuals, reports, graphs, and flowcharts.
- 3** **Topic:** Basic Skills
Standard: Perform and apply numerical concepts and calculations, and solve problems by choosing appropriately from a variety of mathematical techniques using mental, manual, and technological methods.
- 4** **Topic:** Basic Skills
Standard: Receive, interpret, and respond to verbal and nonverbal messages in a manner appropriate to a given situation.
- 5** **Topic:** Basic Skills
Standard: Organize ideas and communicate orally in a clear, concise, and courteous manner.
- 6** **Topic:** Thinking Skills
Standard: Specify goals, objectives, constraints, and supporting factors.
- 7** **Topic:** Thinking Skills
Standard: Identify problems, alternative solutions, and consequences of alternative solutions, and use appropriate techniques to resolve given problems.
- 8** **Topic:** Thinking Skills
Standard: Implement a plan of action making modifications as needed to achieve stated objectives.

- 9** **Topic:** Thinking Skills
Standard: Use effective learning techniques to acquire and apply new knowledge and skills.
- 10** **Topic:** Personal Qualities
Standard: Assess self accurately, set personal goals, monitor progress, and exhibit self-control.
- 11** **Topic:** Personal Qualities
Standard: Choose ethical courses of action.
- 12** **Topic:** Personal Qualities
Standard: Take initiative to accomplish tasks in a timely manner.
- 13** **Topic:** Personal Qualities
Standard: Exert a high level of effort and persevere towards goal attainment.
- 14** **Topic:** Personal Qualities
Standard: Demonstrate adaptability, dependability, responsibility, and such social behaviors as tolerance, honesty, empathy, and courtesy.
- 15** **Topic:** Interpersonal Skills
Standard: Participate and interact as a team member and leader.
- 16** **Topic:** Interpersonal Skills
Standard: Share knowledge and skills with others.
- 17** **Topic:** Interpersonal Skills
Standard: Perform effectively in various environments with people of different ages, genders, cultures, socioeconomic backgrounds, attitudes, and abilities.
- 18** **Topic:** Interpersonal Skills
Standard: Work to satisfy customer/client expectations.
- 19** **Topic:** Interpersonal Skills
Standard: Use strategies appropriate to a given situation to prevent and resolve conflicts.
- 20** **Topic:** Resources
Standard: Select goal-relevant activities, prioritize them, manage time, and prepare and follow schedules.
- 21** **Topic:** Resources
Standard: Use or prepare budgets, make projections, keep records, and make adjustments to meet objectives.
- 22** **Topic:** Resources
Standard: Acquire, store, allocate, and use materials and space efficiently.
- 23** **Topic:** Technology
Standard: Prevent, identify, or solve problems with technical or electronic equipment.
- 24** **Topic:** Technology
Standard: Operate and maintain technical equipment and the work environment safely following applicable industry regulations and guidelines.
- 25** **Topic:** Technology
Standard: Utilize a variety of technologies.
- 26** **Topic:** Business Aspects
Standard: Demonstrate understanding of basic economic concepts and how they are applied in business functions and activities.
- 27** **Topic:** Business Aspects
Standard: Identify forms of business ownership.
- 28** **Topic:** Business Aspects

Standard: Demonstrate understanding of the scope of a business, its place within an industry, and the interrelationship of its parts.

29

Topic: Business Aspects

Standard: Demonstrate understanding of the individual's role, responsibilities, and relationships in the organizational structure of a business.

30

Topic: Business Aspects

Standard: Maintain safety, health, and environmental standards, and address ergonomic concerns.

31

Topic: Career Development

Standard: Make potential career decisions based upon interests, abilities, and values, and formulate appropriate plans to reach career goals.

32

Topic: Career Development

Standard: Demonstrate understanding of the relationship between educational achievement and career planning and how career choices impact family patterns and lifestyle.

33

Topic: Career Development

Standard: Demonstrate effective skills for seeking and securing employment.

34

Topic: Career Development

Standard: Demonstrate understanding of education and career development as a lifelong learning process that requires preparation for change.