



Lesson 8 of 8

Career Quest: Building Your Future in Power, Structural and Technical Systems

Created: 03/2025 by the National FFA Organization

Description of Lesson Series: *There are a wide range of careers available in the Power, Structural and Technical Systems pathway. Students might not even be aware of many of these careers. This lesson series will dive into the multitude of careers that are needed to take a precision agriculture product from idea to finished product and beyond. These lessons are designed to be used in order.*

Student Learning Objectives:

After completing these activities, students will ...

1. Define a clear career goal in the Power, Structural and Technical (PST) Systems sector using the SMART goal framework.
2. Research and analyze various career opportunities.
3. Develop a detailed career blueprint.

Suggested Grade Level:

Grades 9 and 10 (This lesson is written so instructors can scale up or down based on class needs.)

Suggested Time: 60 minutes (*Time requirements may vary based upon student understanding and class schedule.)

Resources/References:

- i. Website: "John Deere Dealership Careers," <https://about.deere.com/en-us/careers/dealership-careers>
- ii. Website: AgExplorer, AgExplorer.FFA.org/career/
- iii. Website: "Wheel of Names," <https://wheelofnames.com/>

Related Resources:

1. "Power Up" Your Future With John Deere, <https://FFA.box.com/s/rmzz3a341ei4f0te2hasrch2ep2tqme1>
2. We Are John Deere Series, <https://FFA.box.com/s/3fjke9572n1lzt298rx5oo0k65m8horv>

Equipment and Supplies Needed:

1. A copy of the "Career Quest" worksheet for each student
2. Internet access
3. Notecards
4. Road map printed out and hung up

Vocabulary:

1. Networking
2. SMART Goal
3. Soft skill

Name: _____

Cross-Curricular Connections:

English/Language Arts

Create a career blueprint.

SAE and FFA Connections

1. Agricultural Technology and Mechanical Systems CDE, [FFA.org/participate/cdes/agricultural-technology/](https://ffa.org/participate/cdes/agricultural-technology/)

Student Activity Sheets:

Direct access to student activity sheets without lesson plan or answer key for easy upload to a learning management system or printing for classwork.

<https://ffa.box.com/s/ehmn8q1ocbn51x80ql3i5wfi38s8obrp> (Word)

<https://ffa.box.com/s/64moh17kih9jnr9y1hq6s6r8d6fqvqi> (PDF)

https://docs.google.com/document/d/1Fo2cU65_VHK8Ram_teFXxzIFE8ynWrAoZR6IECUxZRM/copy (Google)

These Activities Are Aligned to the Following Standards:

FFA Precept

- FFA.PL-A.Action: Assume responsibility and take the necessary steps to achieve the desired results, no matter what the goal or task at hand.
- FFA.PL-C.Vision: Visualize the future and how to get there.
- FFA.PL-E.Awareness: Understand personal vision, mission and goals.
- FFA.PL-F.Continuous Improvement: Accept responsibility for learning and personal growth.
- FFA.PG-I.Professional Growth: Assume responsibility for attaining and improving upon the skills needed for career success.
- FFA.PG-J.Mental Growth: Embrace cognitive and intellectual development relative to reasoning, thinking and coping.
- FFA.CS-M.Communication: Effectively interact with others in personal and professional settings.
- FFA.CS-N.Decision Making: Analyze a situation and execute an appropriate course of action.

AFNR Cluster Skills

- CS.05. Describe career opportunities and means to achieve those opportunities in each of the Agriculture, Food & Natural Resources career pathways.

Common Core – Speaking and Listening

- CCSS.ELA-Literacy.SL.9-10.1 Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9-10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.
- CCSS.ELA-Literacy.SL.9-10.2 Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.

Common Core – Science & Technical Subjects

- AG5 Describe career opportunities and means to achieve those opportunities in each of the Agriculture, Food & Natural Resources Career Pathways.

AFNR Career Ready Practices

- CRP.04. Communicate clearly, effectively, and with reason. Career-ready individuals communicate thoughts, ideas and action plans with clarity, whether using written, verbal and/or visual methods.
- CRP.07. Employ valid and reliable research strategies. Career-ready individuals are discerning in accepting and using new information to make decisions, change practices or inform strategies.
- CRP.08. Utilize critical thinking to make sense of problems and persevere in solving them. Career-ready individuals readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem.
- CRP.10. Plan education and career path aligned to personal goals. Career-ready individuals take personal ownership of their own educational and career goals, and they regularly act on a plan to attain these goals.

Partnership for 21st Century Skills

- Communication
- Critical Thinking and Problem Solving
- Initiative and Self-direction
- Leadership and Responsibility

Name: _____

Lesson Plan:

1. **Bell Ringer:** If you could invent your dream job in the Power, Structural and Technical (PST) Systems sector, what would it be and why?
2. **Introduction:** *Welcome to your Career Quest! Today, you'll take everything you've learned about Power, Structural and Technical Systems and start charting your own path to success. Along the way, you'll explore real-world opportunities, including programs like the John Deere TECH program, which could be your first step toward a rewarding career. By the end of today, you'll leave with a career blueprint — a map to guide you from high school to your dream job.*
3. **Activity:** Each student needs a copy of the worksheet "Career Quest."
 - a. **Part 1: [Interactive Career Stations](#)**
 1. Students rotate through five interactive stations designed to help them explore and prepare for careers. Each station lasts seven to eight minutes. ******These stations will need to be printed in advance and placed around the room.
 - a. Station 1: Goal-Setting Hub
 - Task: Students will write a SMART goal for their future career.
 - Example: "I will enroll in the John Deere TECH Program by Fall 2026 to become a certified John Deere Dealer technician." They will put their goals on a card and those cards will be taped on the road map poster on the wall.
 - b. Station 2: Pathway Exploration
 - Task: Students will use different resources to research different pathways.
 - c. Station 3: Career Skills Café
 - Task: Students brainstorm and identify the top five skills needed for their chosen career.
 - d. Station 4: Experience Planning Center ********You will need to fill in the wheel with ideas. Example Ideas:
 - i. Join FFA
 - ii. Research internships
 - iii. Attend a trade show
 - iv. Shadow a professional in the field
 - v. Take a relevant elective course
 - Task: Students will plan practical next steps, such as joining FFA, attending a trade show or applying for an internship. Students will spin a career wheel with action items and then share how it applies to their goals.
 - e. Station 5: Explore the John Deere TECH Program
 - Task: Students research the John Deere TECH Program and what opportunities are available in the program in their state by visiting <https://about.deere.com/en-us/careers/dealership-careers>.
 - b. **Part 2:** After rotating through the stations, instruct students to complete the career blueprint template on their student activity sheets.
 4. **Follow-up:** Have students share their career goals with the class
 5. **Optional – Extended Learning Opportunities (Not factored into time requirement):**
 - a. Invite professionals from John Deere, local technical colleges or industry leaders to share their career journeys and answer student questions.
 6. **Exit Ticket:** What step will you take this year to prepare you for your future?

Name: _____

Aligned to the following standards:

CS.05; CCSS.SL.9-10.1; CCSS.SL.9-10.2; AG5; CRP.04; CRP.07; CRP.08; CRP.10

Career Quest

Part 1

Directions:

Rotate through the five different career stations around the room and fill out the activity sheet below as you visit each station.

Interactive Career Stations

You will rotate through **five career exploration stations** to help you plan your future. For each station, follow the instructions and take notes on the tasks and questions provided.

Station 1: Goal-Setting Hub

Task: Write a SMART goal for your future career.

SMART Goal Definition: A SMART goal is Specific, Measurable, Achievable, Relevant and Time-bound.

Write your SMART goal below:

- **Career Goal:** _____
- **SMART Goal:** _____

(e.g., "I will enroll in the John Deere TECH Program by Fall 2026 to become a certified John Deere Dealer technician.")

Goal Card Placement:

- Place your SMART goal on a note card and then tape it on the career road map poster at the station.

Station 2: Pathway Exploration

Task: Research different career pathways in the agriculture industry and the careers in that pathway that interest you.

Instructions: Use AgExplorer.FFA.org/career/ to explore different careers in the agriculture industry. Write down the following:

1. **Career Pathway 1:** _____
Career in that pathway: _____
2. **Career Pathway 2:** _____
Career in that pathway: _____
3. **Why these careers interest me:** _____
(Write a few sentences about why these careers appeal to you.)

Station 3: Career Skills Café

Task: Identify the top five skills for your chosen career.

Instructions: Write down the **five most important skills** needed for your career of interest. These skills can be both technical and soft skills.

1. **Skill 1:** _____

Name: _____

2. **Skill 2:** _____
3. **Skill 3:** _____
4. **Skill 4:** _____
5. **Skill 5:** _____

Bonus: Discuss with a partner how these skills will help you succeed in your chosen career.

Station 4: Experience Planning Center

Task: Plan your next steps to gain experience in your career field.

Instructions: Spin the Career Wheel three times and write down the action item that you land on. Reflect on how this action will help you prepare for your career.

- **Action Item From Career Wheel:** _____
- **How this connects to my career goals:** _____
(Explain how this action will help you move toward your future career.)
- **Action Item From Career Wheel:** _____
- **How this connects to my career goals:** _____
(Explain how this action will help you move toward your future career.)
- **Action Item From Career Wheel:** _____
- **How this connects to my career goals:** _____
(Explain how this action will help you move toward your future career.)

Station 5: Explore the John Deere TECH Program

Task: Learn about the John Deere TECH Program and its opportunities in your state.

Instructions: Research the John Deere TECH Program using the materials at the station. Write down the following:

1. **What the program offers:** _____
2. **Opportunities in my state:** _____
3. **How this program can help my career goals:** _____

Name: _____

Part 2

Directions:

Now that you’ve completed all five stations, use the career blueprint template below to consolidate everything you’ve learned and plan your next steps.

Career Blueprint Template

1. Career Goal

My Career Goal:	Why does this career interest me?
What is one short-term SMART goal you want to accomplish in the next one to two years to help you toward this career?	What is one long-term SMART goal that will help you in the next three to five years to move forward in this career?

2. Skills: To succeed in your chosen career, identify and list the top three skills you need to focus on developing.

Skill	Why this is important for my career
<i>Ex. Teamwork</i>	<i>I will be working with other people and need to know how to work with people who are different than me.</i>
1.	
2.	
3.	

3. Education and Training Path

Required Education and Training: What are the educational qualifications needed for this career? This could include high school courses, certifications or college degrees.	Programs and Opportunities: What specific programs, training or apprenticeships do you need to attend to reach your career goal? Consider programs like the John Deere TECH Program, internships or apprenticeships.

Name: _____

- 4. Networking Plan:** Building relationships with people in your field is essential for career growth. Identify key people or organizations that can help you along the way.

Who do I need to connect with?	How will they help me?
Ex. John Deere Dealership	They will help connect me with the John Deere TECH Program.
1.	
2.	
3.	

- 5. Practical Experience Plan:** Gaining hands-on experience is crucial for building your career. Plan how you will gain experience in your chosen field.

What internships or apprenticeships can you apply for in the next year to help you gain practical experience?	How will this help me?
What extracurricular activities or clubs can help you build skills related to your career goal (e.g., FFA, robotics club, volunteering)?	How will this help me?
What job or volunteer experience can help you develop relevant skills for your career?	How will this help me?

- 6. Financial Plan for Education:** Consider the cost of the education and training you'll need to pursue your career and how you plan to finance it.

Estimated Costs of Education/Training	How will I pay for it?

Name: _____

Reflection Questions:

1. What do you think will be the biggest challenge in reaching your career goal?

2. What will keep you motivated to stay on track?

3. What do you think your first step should be in working toward your career?

4. When can you take that step?

Name: _____

KEY: Career Quest

Part 1

Directions:

Rotate through the five different career stations around the room and fill out the activity sheet below as you visit each station.

Interactive Career Stations

You will rotate through **five career exploration stations** to help you plan your future. For each station, follow the instructions and take notes on the tasks and questions provided.

Station 1: Goal-Setting Hub

Task: Write a SMART goal for your future career.

SMART Goal Definition: A SMART goal is Specific, Measurable, Achievable, Relevant and Time-bound.

Write your SMART goal below:

- **Career Goal:** ____ *Answers will vary.* _____
- **SMART Goal:** ____ *Answers will vary.* _____
(e.g., "I will enroll in the John Deere TECH Program by Fall 2026 to become a certified John Deere Dealer technician.")

Goal Card Placement:

- Place your SMART goal on a note card and then tape it on the career road map poster at the station.

Station 2: Pathway Exploration

Task: Research different career pathways in the agriculture industry.

Instructions: Use AgExplorer.FFA.org/career/ to explore different careers in the agriculture industry. Write down the following:

1. **Career Pathway 1:** ____ *Answers will vary.* _____
2. **Career Pathway 2:** ____ *Answers will vary.* _____
3. **Why these careers interest me:** ____ *Answers will vary.* _____
(Write a few sentences about why these careers appeal to you.)

Station 3: Career Skills Café

Task: Identify the top five skills for your chosen career.

Instructions: Write down the **five most important skills** needed for your career of interest. These skills can be both technical and soft skills.

1. **Skill 1:** ____ *Answers will vary.* _____
2. **Skill 2:** ____ *Answers will vary.* _____
3. **Skill 3:** ____ *Answers will vary.* _____
4. **Skill 4:** ____ *Answers will vary.* _____
5. **Skill 5:** ____ *Answers will vary.* _____

Bonus: Discuss with a partner how these skills will help you succeed in your chosen career.

Name: _____

Station 4: Experience Planning Center

Task: Plan your next steps to gain experience in your career field.

Instructions: Spin the Career Wheel and write down the action item that you land on. Reflect on how this action will help you prepare for your career.

- **Action Item From Career Wheel:** ____ *Answers will vary.*_____
 - **How this connects to my career goals:** __ *Answers will vary.*_____
- (Explain how this action will help you move toward your future career.)

Station 5: Explore the John Deere TECH Program

Task: Learn about the John Deere TECH Program and its opportunities in your state.

Instructions: Research the John Deere TECH Program using the materials at the station. Write down the following:

1. **What the program offers:** ____ *Answers will vary.*_____
2. **Opportunities in my state:** ____ *Answers will vary.*_____
3. **How this program can help my career goals:** ____ *Answers will vary.*_____

Name: _____

Part 2

Directions:

Now that you’ve completed all five stations, use the career blueprint template below to consolidate everything you’ve learned and plan your next steps.

Career Blueprint Template

1. Career Goal

My Career Goal:	Why does this career interest me?
Answers will vary.	Answers will vary.
What is one SMART goal you want to accomplish in the next one to two years to help you toward this career?	What is one long-term SMART goal that will help you in the next three to five years to move forward in this career?
Answers will vary.	Answers will vary.

2. Skills: To succeed in your chosen career, identify and list the top three skills you need to focus on developing.

Skill	Why this is important for my career
Ex. Teamwork	I will be working with other people and need to know how to work with people who are different than me.
1. Answers will vary.	Answers will vary.
2. Answers will vary.	Answers will vary.
3. Answers will vary.	Answers will vary.

3. Education and Training Path

Required Education and Training: What are the educational qualifications needed for this career? This could include high school courses, certifications or college degrees.	Programs and Opportunities: What specific programs, training or apprenticeships do you need to attend to reach your career goal? Consider programs like the John Deere TECH Program, internships or apprenticeships.
Answers will vary.	Answers will vary.

Name: _____

- 4. Networking Plan:** Building relationships with people in your field is essential for career growth. Identify key people or organizations that can help you along the way.

Who do I need to connect with?	How will they help me?
<i>Ex. John Deere Dealership</i>	<i>They will help connect me with the John Deere TECH Program.</i>
1. <i>Answers will vary.</i>	<i>Answers will vary.</i>
2. <i>Answers will vary.</i>	<i>Answers will vary.</i>
3. <i>Answers will vary.</i>	<i>Answers will vary.</i>

- 5. Practical Experience Plan:** Gaining hands-on experience is crucial for building your career. Plan how you will gain experience in your chosen field.

What internships or apprenticeships can you apply for in the next year to help you gain practical experience?	How will this help me?
<i>Answers will vary.</i>	<i>Answers will vary.</i>
What extracurricular activities or clubs can help you build skills related to your career goal (e.g., FFA, robotics club, volunteering)?	How will this help me?
<i>Answers will vary.</i>	<i>Answers will vary.</i>
What job or volunteer experience can help you develop relevant skills for your career?	How will this help me?
<i>Answers will vary</i>	<i>Answers will vary.</i>

- 6. Financial Plan for Education:** Consider the cost of the education and training you'll need to pursue your career and how you plan to finance it.

Estimated Costs of Education/Training	How will I pay for it?
<i>Answers will vary.</i>	<i>Answers will vary.</i>

Name: _____

Reflection Questions:

1. What do you think will be the biggest challenge in reaching your career goal?

Answers will vary.

2. What will keep you motivated to stay on track?

Answers will vary.

3. What do you think your first step should be in working toward your career?

Answers will vary.

4. When can you take that step?

Answers will vary.