Civil Construction Pathway
Paving the Way to a Bright Future

Faced with a shrinking workforce, Hoosier highway contractors, the Indiana Department of Transportation (INDOT) and other industry organizations created an innovative civil construction pathway (CCP) for Indiana high school students. The CCP prepares students and their influencers for careers building and maintaining the state’s infrastructure. CCP students can expect a career path that starts with a shovel in hand and can eventually lead to company ownership and industry leadership.

Curriculum and lab activities focus on asphalt and concrete paving, bridges, construction inspection, erosion control, flagging, formwork, heavy equipment operation, safety, soils and surveying. The pathway combines the National Center for Construction Education Research (NCCER) Heavy Highway Construction Curriculum with hands-on construction experiences to create student excitement and interest.

Authentic student experiences are at the core of the CCP, and most of those occur in the Sandbox, an outdoor classroom bringing students and industry partners together – building relationships through learning activities.

Currently, CCP students can acquire flagging, Occupational Safety Health Administration Construction Safety (OSHA-10), skid steer and mini-excavator certifications. Students with these certifications are valuable job candidates who are ready for immediate success via a paid pre-apprenticeship during their senior year.

The final component to the CCP is a robust teacher training and ongoing support by employer partners. This provides valuable resources and create a community of CCP leaders who can build and inspire future generations of students AND educators.

As the program grows, more students and their families are feeling the positive impact of finding a meaningful, attainable, lucrative civil construction career and the straight-forward path to get there. A four-year college prep education plan may not be the route for every student, but today’s CCP students starting in the Sandbox can be tomorrow’s highway, heavy and utility construction industry leaders.

**TEACHER BENEFITS**

1
Week of paid teacher training for new CCP teachers

**VALUABLE TRAINING**

$1000
Stipend for teachers attending CCP teacher training week

**PROFESSIONAL DEVELOPMENT**

40
Professional Growth Points for CCP teacher training week

**SCHOOL FUNDING**

$2700
Total IDOE Next Level dollars for a student completing the CCP
YEAR ONE

The Principles of Construction course gives students a firm foundation in the concept of construction as a whole. Students will learn about construction history and traditions. They’ll learn the basic hand and power tools of the trade and how to handle them safely. The class explores the basic components of civil construction at the basic level from planning, engineering, site selection and preparation to materials, equipment and project delivery. This introduction also includes career opportunities, construction technology and future industry trends.

YEAR TWO

In their second year in the CCP, students dig into the specialized field of highway, heavy and utility construction. The Civil Construction I course starts with an introduction to basic concepts and then moves on to heavy equipment, site work and soil composition. During their second year in the program, students participate in practical exercises including ATSSA flagging, utility locating, skid steer/mini excavator operation, crane communication and directional boring. Practical labs also include deep dives into soils, civil drawings and rigging.

YEAR THREE

The Civil Construction II course continues the learning experience and introduces technical subjects like storm water erosion control, surveying, working with asphalt and concrete and bridge construction. Practical labs and jobsite visits cover industry standards and guidelines, construction layout, differential leveling, theodolite training, CAD certifications and more. Year Three students greatly benefit from developing industry partnerships that provide practical, hands-on experiences in mixing, paving and concrete pumping.

YEAR FOUR

Course work and practical training within the CCP culminates in work-based learning and paid apprenticeships for fourth year students. Taking advantage of industry partner relationships, students are placed on jobsites building roads, bridges and utility infrastructure that benefit all Hoosiers. Most fourth year students graduate one week and begin permanent employment the next. CCP students are paid for their education rather than paying for it after graduation.