



COURSE STRANDS*

ENGINEERING AND ADVANCED MANUFACTURING

Engineering and Advanced Manufacturing is designed for students who are interested in engineering and manufacturing fundamentals, entrepreneurship, and innovation. Students experience hands-on, active learning with full immersion in real-world projects sponsored by business partners like Ford Motor Company, Holland 1916, Garmin, Black & Veatch, Burns and McDonnell, Honeywell. Engineering projects are tailored to student interest in the fields of chemical, electrical, mechanical, civil, environmental, software/computer, architectural, advanced manufacturing, robotics, biological, and environmental.

GLOBAL BUSINESS AND ENTREPRENEURSHIP

In Global Business and Entrepreneurship, students partner with local, regional, national and international businesses to produce marketing plans, advertising and promotional plans, customer research, social media plans, event management, and strategic plans. They will be able to communicate with expert professionals locally and globally, while working as a team member on projects with their companies developing life-long mentoring relationships.

MEDICINE AND HEALTHCARE

Medicine and Healthcare fully immerses students in North Kansas City Hospital and Liberty Hospital providing unprecedented access to real world experiences in the dynamic field of medicine and healthcare.

In the classroom, students will expand upon principles of human physiology through in-depth case studies of body systems, develop fluency in basic medical language, formulate treatment plans for patients, practice physical assessment skills, and perform patient care and life-saving procedures within a simulation lab. Students will receive certification in CPR and AED.

TECHNOLOGY SOLUTIONS

Technology Solutions is ideal for students who are interested in developing the professional and technical skills required to forge forward in exploring all areas of technology and creative design.

Students interested in technology will perform real world projects for clients utilizing the expertise of diverse guest instructors, mentors and business partners, e.g. Cerner, NetStandard, Sprint, and other technology companies.

Students interested in design will create a wide array of digital assets

Northland Center for Advanced Professional Studies (NCAPS) immerses high school students in professional environments through engaging curriculum that is driven by passionate industry leaders and delivered by visionary instructors.

The NCAPS difference

75% of graduates

with NCAPS internship experience receive job offers (2013-2014)

100% of curriculum

is tied to economic and workforce development and is eligible for high school and college credit

250+ young minds

in five business satellites for 2014-15 NCAPS program

250+ companies

helping to shape the future workforce

200+ new internships

for 2014-15 NCAPS students



in a profession-based learning environment, which provides opportunities to collaborate with mentors and business clients, e.g. Hallmark, VML, Barkley, HINT, MindMixer.

GLOBAL LOGISTICS AND TRANSPORTATION

Global Logistics and Transportation is ideal for students who are interested in developing the professional and technical skills required to forge forward in exploring all areas of logistics and transportation. Students will learn a set of skills that will allow them to effectively streamline the flow of materials, finances and information for a company.

This program addresses concepts, techniques and systems used

in supply chain management and decision support. Specific areas include manufacturing planning and management techniques and systems, inventory management, warehouse layout, distribution management, routing and scheduling, process analysis, network analysis and the application of simulation and optimization techniques.

***See side 2 for project examples and FAQs**

>> Learn more at northlandcaps.org

PROJECT EXAMPLES

ENGINEERING AND ADVANCED MANUFACTURING

- Partner with the National Airline History Museum to design more efficient electronics involved in controlling traditional and unmanned aircraft.
- Partner with Holland 1916 Quality Managers to redesign the process flow of operator cabins that enable cost savings.

GLOBAL BUSINESS AND ENTREPRENEURSHIP

- Partner with Clay County Economic Development to gather and analyze data from businesses in Clay County, then create a recommendation for the development of upscale shopping experiences, courting companies like Trader Joe's, Sprouts, and Whole Foods.
- Partner with a start-up company located in Kansas City Start-Up Village to develop a comprehensive marketing strategy, including a social media strategy to increase the awareness of the new product line.

GLOBAL LOGISTICS AND TRANSPORTATION

- Partner with Scarborough International to determine the "Next" technologies of logistics and transportation, e.g. drone delivery, mining 'big data' to improve transportation, features that make trucks more autonomous, like the "Wal-Mart Advanced Vehicle Experience".
- Partner with Ford Motor Company to develop the new shipping and logistics process for the upcoming aluminum bodied F-150, which is capable of towing and hauling more than any other light duty pickup.

MEDICINE AND HEALTHCARE

- Partner with North Kansas City Hospital to collect and interpret tube feeding data via tube feeding pumps in patient care areas.
- Partner with Liberty Hospital and Northland CAPS engineering students to design and develop a plan to build a state-of-the-art simulation lab to practice patient care and life- saving procedures.

TECHNOLOGY SOLUTIONS

- Partner with LightEdge Solutions, enterprise-grade cloud service provider, to determine and analyze capacity tolerances.
- Partner with independent filmmakers from Kansas City area to execute every position on a film and television production set, e.g. director, cinematographer, key grip, set dresser, and electrician.

FREQUENTLY ASKED QUESTIONS

IS NORTHLAND CAPS A TRADE SCHOOL OR VOCATIONAL PROGRAM?

No. Northland CAPS provides students the opportunity to deeply explore professions of interest through a profession- based, inquiry learning method. Local and global business partners participate with highly skilled instructors to provide authentic exposure and skill acquisition in high demand/high skill professions.

HOW MUCH DOES IT COST?

Tuition for the program is paid by the student's home district. North Kansas City Schools is the fiscal agent for the Northland CAPS program. Northland CAPS is governed by a board made up of area business leaders and superintendents. The board is given authority to manage this program through a cooperative memorandum of understanding approved by all six school districts.

WHAT DO COLLEGES THINK OF A PROGRAM LIKE NORTHLAND CAPS?

College and universities believe a program like the Northland CAPS is a differentiator for a student. Many students entering college have significant academic performance, but a student that has strong academic performance AND has professional skills, rigorous internships, and a portfolio of real business projects will leapfrog college peers. See college endorsements <http://www.northlandcaps.org/colleges>

WHAT IF A STUDENT DOES NOT LIKE THE PROGRAM ONCE THEY BEGIN?

Students can withdraw from the program within the first five school days.

HOW WILL I BE GRADED FOR THE CLASS?

Instructors will provide detailed syllabus, students are graded on project work, assessments, and professional skills (including attendance and dress code). Students will dress business casual every day, unless otherwise specified by the instructor and/or project work.

IF I TAKE A STRAND FOR THE FULL YEAR, WHAT WILL MY SECOND SEMESTER BE LIKE?

Full year students have the opportunity to secure an internship second semester. Available internships are posted, students apply and interview with businesses. If selected, a student will "work" up to four days a week at that company. One day per week students report back to their home site for additional professional development.

HOW DO I APPLY FOR THE 2015-2016 SCHOOL YEAR?

You must be a junior or senior for the 2015-16 school year and attend one of the participating districts: Kearney, Liberty, North Kansas City, Park Hill, Platte County or Smithville. Be able to provide your own transportation. Complete the on-line application at www.northlandcaps.org/apply and submit by February 6, 2015.



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