



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, Smithville or Excelsior Springs. Be able to provide your own transportation.





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The gap

Over 1.5 million young adults graduate from US colleges every year, yet 14 million jobs requiring this education will go unfulfilled over the next 10 years.
So what is the gap?

Real-world preparedness.

Missouri Innovation Education Partnership

75% of graduates with NCAPS internship experience receive job offers

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

Building a stronger workforce

NCAPS combines hands-on career experiences and classroom learning, partnering students and employers for a stronger future.



Places students in real business environments



Adjusts curriculum to industry trends and needs



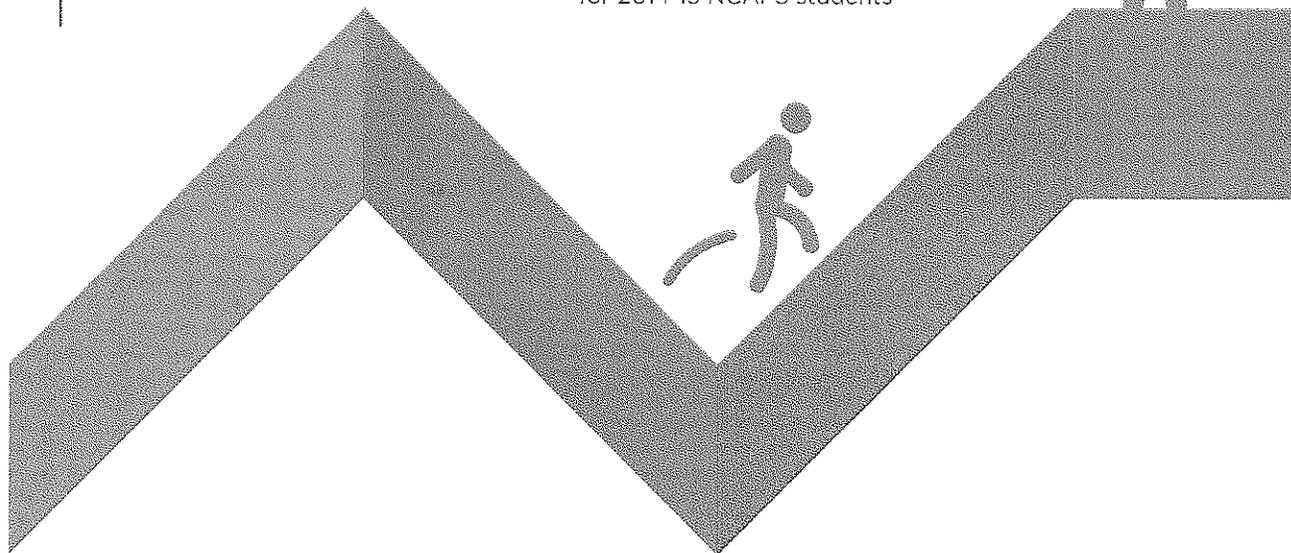
Promotes "anywhere" learning and teaching



Partners educators and companies for student-driven learning



Helps students identify and grow skills early



"You're actually learning how to interact with other professionals. NCAPS is teaching me how to express that so businesses will actually want to hire me."

— Travis Fennel student

"NCAPS provides an opportunity for students to better understand and be prepared for both the demands and the opportunities of fast-growing fields such as health care IT."

— Laura Evans Director of Talent Development Cerner

Impact the future

- Become a mentor
- Provide an internship
- Encourage a student
- Host a class
- Spread the word

>> Learn how at northlandcaps.org

Business partners

360 Architects
AbPathfinder and Greentree
Accelerant Innovations
ACI Boland Architects
Adknowledge
Affinity Management Group
Alpha Graphics
Argosy Casino
Arkema
Arvest Bank
Austin Iron Works
BankLiberty
Barkley
BHC Rhodes
Big Bang
Blue Cross Blue Shield
Board Docs
Boehringer Ingelheim
Boost Physical Therapy
Boys & Girls Club KC
Briarcliff Chapel
Carroll Parts
CBC Real Estate Group
Center for Entrepreneurial Ecosystem
Development
Cerner
Children's Mercy Hospital
Cisco
City of Gladstone
City of Kansas City
City of Riverside
Clay County EDC
Commerce Bank
CRB Engineers, Inc.
DST
Eagle Animal Hospital
Earthworks/Exchange City
Edward Jones
Engage Mobile
Exhibit Associates
Financial Avenues LLC
First Missouri Bank
Fishnet Securities
FolioMatch
Ford Motor Company
Gary Crossley Ford
Gastinger Walker Harden + BeeTriplet
Buck

General Electric Company
Gladstone Community Center
Google
Grafton Staffing Companies
Greater Kansas City Community
Foundation
Habitat for Humanity Kansas City
Haldex Brake Products Corp
Hallmark
Harley Davidson Motor Company
Harmony Vineyard Church
Harvest Productions
Harvesters
Henderson Engineers Inc
Herzog
Hillcrest Transitional Housing
Hispanic Economic Development Corp
HNTP
HoeferySocki
Holland 1916
Hollis Miller
Honeywell Industries
Hope House
Hospice Advantage
Humana
Hunt Midwest
Industrial Spring Corporation
Informed Health Solutions
Ingredient
Innovative Networks
JE Dunn
Kansas City Area Development Council
Kansas City Hospice House
Kauffman Fasttrac
Kauffman Foundation
KC Aviation Department
KC Business Journal
KC Digital Drive
KC Manufacturing Network
KC Smartport
KC Sourcelink
KC Startup Village
KC Stem Alliance
KCFD
KCP&L
Kellogg
KU Medical Center
Langley Empire Candle Company

Liberty Hospital
Liberty Hospital Foundation
Lightedge
Lindsay Machine Works
LittleHoots
Lumen Touch
Magna
Manor Thrift Shop
Maple Woods Community College
Mastercard
Mayor's Office - Kansas City
McCown Gordon Construction
Mechanical Contractors Association KC
Meritas Health
Metro Air
Metropolitan Community College
Milbank Manufacturing
Mind Mixer
Missouri Kansas Supply (MKS)
Missouri Western State University
Mosaic Life Care
Mozilla Gigabit Community Fund | KC
MRI Global
Multivac
National Airline History Museum
National Marketing Resources
NetStandard
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Niles Media
North Kansas City Hospital
North Kansas City Business Council
North Point Development
NorthCare Hospice and Palliative Care
Northland Regional Ambulance District
Northwest Missouri State University
Olsson Associates
Oracle
Orange EV
Parkville Chamber of Commerce
Platte County EDC
Platte Valley Bank
Populous
Prep KC
Pro Circuit
ProAthlete
Propoganda 3
Rarewire
Reactor Desgin Studio

Reece and Nichols
Rockhurst University
Rockwell Labs Ltd
Rockwell Collins
Saint Luke's Health System
Scarborough International
Sophisticated Spirit
Sporting Innovations
Sporting KC
Sprint
Sprint Accelerator
Square Offs
Starrtek LLC
Steven D. Wolcott, Attorney at Law
Synergy Services
Techstars
The Flynt Group
The Lean Lab
The Logistics Store
The Purple Guys
Think Big Partners
TK Architects International
Tnemec Company
Tradebot
Tri-lateral Sales, Inc.
Trinity Logistics
Triple I
Truman Medical Center
Tucker Leadership Lab
UMB Bank
UMKC
US Engineering Company
Validity
Vandergren Inc
Vanguard Packaging
Vari-form
Veterinary Center of Liberty
Vinsolutions
VML
Voltage Creative, LLC
VolunteerMark LLC
William Jewell College
WireCo
Zurich



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