

A Proposal to Develop Bachelor Degree Candidates in Engineering and Science:

A Collaboration of Rock Valley College, Northern Illinois University, Rockford College and School Districts throughout Northern Illinois

Program Intent: Based on the Rock Valley College Running Start Program, high achieving high school rising juniors from high schools in the greater Rock River Region will have the opportunity to apply to Rock Valley College for enrollment in an Associate Degree in Engineering or Science, specifically designed to transfer to Northern Illinois University's Bachelor Degree in Mechanical or Electrical Engineering, or the Rockford College's Bachelor Degree in Biology, Biochemistry or Chemistry. In addition, qualified rising high school seniors will be invited to enroll in a one-year Engineering or Science Running Start program, designed to complete the first-year degree requirements toward a bachelor's degree, while also completing high school credits leading to the high school diploma.

All applicants must demonstrate academic readiness for the program, based on their Grade Point Average, prior coursework in science and mathematics, results on the Rock Valley College academic readiness assessment and the recommendation of the High School principal. Those students who are accepted for admission will complete their requirements for High School graduation and their Associate Degree simultaneously. Upon completion of the High School Diploma and Associate Degree students may apply for junior status admission to Northern Illinois University's Bachelor in either Electrical or Mechanical Engineering Degree, offered in Rockford at Rock Valley College, or to Rockford College's Bachelor's in Science degree. With two additional years of study at NIU-RVC campus, or at Rockford College, successful students will graduate with their Bachelor's Degree.

Many aerospace and high tech manufacturing companies see an urgent need to develop a substantial part of their engineering or scientific workforce from within the Rock River Region. It can be a challenge to recruit strong candidates to our region; one that costs more money and resources than recruiting to other parts of the USA. This is especially true in engineering. Thus, these local BS Degrees will stimulate economic development and serve many of our best companies' need for engineers and scientists.

Program Details:

- School Boards for Districts in the greater Rock River Region must approve this course of study before a student can apply for admission.
- Faculty from RVC, NIU and RC will determine curricula for both the Associate of Science and Bachelor of Science Degrees.

- An Advisory Board comprised of engineers and scientists will be actively involved in the planning and the implementation of the curriculum and the total learning experience. Special focus will be directed to aerospace and manufacturing companies.
- Local Aviation, Engineering and Manufacturing companies will be deeply connected to the students in this program. These companies will augment the academic degree program by offering “real-work” experiences. They will also provide mentoring, internship and summer work opportunities to participants.
- Most courses for the dual credit high school program will be primarily delivered in a cohort format, i.e., students accepted into the program will take many of the classes together.
- Students in the dual credit program may be required to enroll in classes during the summer to complete their requirements for the High School Diploma and Associate Degree within two years.
- High school students participating in the dual credit Associate Degree in engineering or science program will not pay tuition and fees for all courses that they successfully complete with a grade of “C” or better.
- The participating High Schools will use the existing Running Start financial structure to run the program.
- Adult students may take the necessary community college courses to receive an Associate Degree in Engineering or Science, with an understanding that they will also be eligible to apply to the Bachelors Degree Program from NIU or RC.
- Completion of the Associate Degree in Engineering or Science does not necessarily assure that a student will be accepted to the NIU or Rockford College. Both Colleges will develop academic requirements for admission into their programs.

Implementation Timetable:

- Northern Illinois University and Rockford College fully supports this proposal. Faculty and Deans from RVC, NIU and Rockford College are already planning for implementation.
- The proposed academic partnership will be announced in early November, 2011. Potential educational and business partners will be informed as soon as possible, so they can participate at the press conference announcing this exciting collaboration.
- Student recruitment will begin in November and continue through March. The partnership will determine a desired size of the initial student cohort, and recruit with this number in mind.
- The enthusiastic engagement of the business community is a key and necessary component of this partnership.