CURRICULUM ALIGNMENT AND MAPPING

Scaling Up Conference
Hilton Garden Hotel
Champaign, IL
March 7, 2013
Presenters

Joy Mordica  
Research Specialist  
Pathways Resource Center  
University of Illinois at Urbana-Champaign

David Carson  
Director of College & Career Readiness  
Rockford School District  
Rockford, IL

Laurie Preece  
Executive Director  
Alignment Rockford  
Rockford, IL
Objectives of the Session

• Explore the utility of curriculum alignment for developing and refining programs of study
• Emphasize the relevance of partnerships in curriculum alignment projects
• Provide an example of a community partnership focused on college and career readiness
Agenda

• Overview and Resources (15 minutes)
• Real-World Example (15 minutes)
• Q&A Session (20 minutes)
• Wrap Up (5 minutes)
Why focus on P-20 Alignment?

Broad support for increased alignment:

- **Researchers**
  - Curriculum Alignment Research Suggests That Alignment Can Improve Student Achievement (Squires, 2012)

- **Practitioners**
  - Common Standards Bring K-12, Higher Ed Together (Gewertz, 2012)

- **Organizations**
  - Common Core State Standards Initiative (CCSSI)
  - Council of Chief State School Officers and National Governors Association

- **State and National Legislation**
  - College and Career Readiness Act (Public Act 095-0694)
    - Bridge gaps between secondary and postsecondary education
    - Ensure alignment of standards and curriculum
  - Perkins IV
    - Coordination among levels of the education system
    - Integration of academic and technical education
    - Involvement of business and industry
What is Curriculum Alignment?

Curriculum alignment of programs of study is achieved through a collaborative process in which stakeholders evaluate a specific program of study to ensure that the changing needs of students and the workforce are addressed. Secondary and postsecondary faculty, academic advisors, program coordinators, employers, and industry representatives collaborate to review the curriculum and confirm that the sequence of courses in the program of study includes the academic, technical and employability skills necessary for college and career readiness and success.
Types of Curriculum Alignment

- Secondary and Postsecondary Components
  - Vertical and Horizontal
    - Career Academies Model ✓
    - Paired Course Model
    - Dual and Articulated Courses
- Standards
  - Common Core State Standards
  - State Standards
  - Industry and Occupational Standards
- Employer Needs/Labor Market Demand
  - Skill sets
  - Workforce demand
- Disciplines
  - Within and across subject areas
- College and Career Readiness
  - Student and faculty expectations
Programs of study = clear opportunities for working with partners and enhancing alignment

Health Science: Health Informatics
Career Pathway Plan of Study for ▶ Learners ▶ Parents ▶ Counselors ▶ Teachers/Faculty

This Career Pathway Plan of Study (based on the Health Informatics Pathway of the Health Science Career Cluster) can serve as a guide, along with other career planning materials, as learners continue on a career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner’s educational and career goals. This Plan of Study, used for learners at all educational institutions, should be customized with course titles and appropriate high school graduation requirements as well as college entrance requirements.

<table>
<thead>
<tr>
<th>EDUCATION LEVEL</th>
<th>ENGLISH/LANGUAGE ARTS</th>
<th>MATH</th>
<th>SCIENCE</th>
<th>SOCIAL STUDIES/SCIENCES</th>
<th>OTHER REQUIRED COURSES</th>
<th>CAREER AND TECHNICAL COURSES AND/OR DEGREE MAJOR COURSES FOR HEALTH INFORMATICS PATHWAY</th>
<th>SAMPLE OCCUPATIONS RELATING TO THIS PATHWAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>English/Language Arts I</td>
<td>Algebra I</td>
<td>Earth or Life or Physical Science</td>
<td>State History or Civics</td>
<td>All plans of study should meet local and state high school graduation requirements and college entrance requirements. Certain local student organization activities are also important including public speaking, record keeping and work-based experiences. A foreign language is recommended.</td>
<td>• Health Science I: Introduction to Health Science ▶ Information Technology Application</td>
<td>• Occupations Requiring Less than Baccalaureate Degree ▶ Admission Clerk ▶ Community Services Specialist ▶ Data Analyst ▶ Data Information Manager ▶ Health Information Coder ▶ Medical Assistant ▶ Medical Biller ▶ Medical Information Technologist ▶ Patient Financial Services Representative ▶ Pharmacy Services Associate ▶ Reimbursement Specialist ▶ Transcriptionist ▶ Unit Coordinator</td>
</tr>
<tr>
<td>10</td>
<td>English/Language Arts II</td>
<td>Geometry</td>
<td>Biology</td>
<td>U.S. History</td>
<td></td>
<td>• Health Science II: Health, Safety and Ethics in the Health Environment</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>English/Language Arts III</td>
<td>Algebra II</td>
<td>Chemistry</td>
<td>World History</td>
<td>Sociology</td>
<td>• Health Science III: Employment in Health Occupations</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>English/Language Arts IV</td>
<td>Statistics or other math course</td>
<td>Physics or other science course</td>
<td>Psychology</td>
<td>Economics</td>
<td>• Health Science IV: Introduction to Health Informatics</td>
<td></td>
</tr>
</tbody>
</table>

Articulation/Dual Credit Transcribed-Postsecondary courses may be taken/moved to the secondary level for articulation/dual credit purposes.

<table>
<thead>
<tr>
<th>POSTSECONDARY</th>
<th>ENGLISH COMPOSITION</th>
<th>ALGEBRA</th>
<th>CHEMISTRY/BIOLOGICAL SCIENCE</th>
<th>AMERICAN GOVERNMENT/Psychology</th>
<th>Health Science III: Health Informatics Preparation</th>
<th>Continue Courses in the Area of Specialization</th>
<th>Complete Health Informatics Major (4-Year Degree Program)</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td></td>
<td>Algebra</td>
<td>Chemistry/Biological Science</td>
<td>American Government/Psychology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Speech/Oral Communication Technical Writing</td>
<td>Statistics or Calculus</td>
<td>Microbiology</td>
<td>American History/Sociology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Project funded by the U.S. Department of Education (VOS1B020001)

http://www.ilprogramsofstudy.org/
What is Curriculum Mapping?

A curriculum map is a two-dimensional **data recording tool** used to **facilitate** the **examination** of programs of study. The components of curricula are displayed in the **matrix** so that **disconnects** between courses, standards, and the skills sought by employers are **visually apparent**. Once disconnects are identified, **modifications** to the curriculum can be made.
Essential Steps of Curriculum Mapping

1) Identify **points** in the curriculum to **introduce** or **reinforce** knowledge, skills or core standards.

2) Identify **resources necessary** to integrate the knowledge, skills or core standards into the sequence of instruction

3) Determine effective strategies to **assess student acquisition** of the knowledge, skills or core standards

4) Review **regularly** for continuous improvement

# Curriculum Mapping for Aligning Standards

<table>
<thead>
<tr>
<th>Course/Unit</th>
<th>Common Core ENG/LA Standards</th>
<th>Common Core Math Standards</th>
<th>Common Core Science Standards</th>
<th>Specific Occupational Skills Standard</th>
<th>Technical Core Standards</th>
<th>Specific Employer Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication in healthcare</td>
<td>A.APR.1; A.APR.7; N.RN.3; N.Q.1</td>
<td></td>
<td></td>
<td>Unit identification and abbreviations</td>
<td>24 hr. clock</td>
<td></td>
</tr>
<tr>
<td>Patient assessment</td>
<td>A.APR.1; A.APR.7; N.RN.3; N.Q.1; G.MG.3; A.CED.4</td>
<td></td>
<td></td>
<td>Conversions; Instrument Reading; Vital Signs</td>
<td></td>
<td>Input/output Height/weight</td>
</tr>
</tbody>
</table>
Where do you go from here?

### Program of Study

<table>
<thead>
<tr>
<th>Education Levels</th>
<th>English</th>
<th>Math</th>
<th>Science</th>
<th>Social Studies/Sciences</th>
<th>Other Required Courses, Electives, and Learner Activities</th>
<th>Career &amp; Technical Courses and/or Degree Major Courses</th>
<th>SAMPLE Occupations Relating to this Pathway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest Inventory Administered</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Articulation/Dual Credit Transcripted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postsecondary</td>
<td>Year 13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Year 14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Year 15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Year 16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
RESOURCES
Guiding Principle #3: Design Elements

- Secondary and postsecondary collaboration
- Course and content aligned through articulation agreements
- Curriculum aligned with relevant standards and certifications
- Programs with multiple entry and exit points
- Development of a coherent sequence of courses
- Data-sharing agreements
- Multiple opportunities to build “college knowledge”

Source: http://occrl.illinois.edu/projects/pos/principle-4-enhanced-curriculum-and-instruction/
Guiding Principle  # 4: Design Elements

- **Integrate** academic and career technical content
- Infuse **career exploration**, development and **guidance**
- Encourage **dual credit** opportunities
- Involve business, industry and community **partners**
- Provide a **rigorous foundation** for academic and technical content
- Include rigor and **support services** to reduce need for remediation
- Include multiple measures of **assessment**
- Use **technology** to foster technical skills and reach more learners

Illinois Pathways Interactive Website

An ISBE approved credit-bearing course or postsecondary CIP code that embodies a set of learning activities that culminate in the mastery of standards.
### Informatics / Health Information Technology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title/Description</th>
<th>Grade Level</th>
</tr>
</thead>
</table>
| 10003A000  | Computer Information and Technology  
Computer and Information Technology courses teach students to operate and use computer and information technology, emphasizing their role as tools to communicate more effectively, conduct research more efficiently, and increase productivity. Course content includes the legal and ethical issues involved with computer technology and use. | 11.12       |
| 14153A001  | Medical Office Procedures - CTE Course  
Medical Office Procedures courses expose students to clerical knowledge, abilities, and procedures as they apply to the medical field. These courses typically include (but are not limited to) topics such as medical transcription, medical insurance, financial accounting, scheduling, and patient record-keeping. Medical terminology and routine medical procedures are covered to provide a context for clerical duties. | 11.12       |
| 10052A000  | Office and Administrative Technologies  
Office and Administrative Technologies courses provide students with instruction and experience in developing technical, problem-solving, and decision-making skills essential for office and/or administrative occupations. Emphasis is placed on integrating and applying knowledge and skills to realistic office and administrative situations utilizing current and relevant technology. | 11.12       |
### Health Science Pathways

**Informatics / Health Information Technology**

- Biomedical Research and Development
- Support Services
- Therapeutics and Diagnostics

### Learning Exchange

- View Health Science Learning Exchange

### Orientation (e.g., Middle & High School)

<table>
<thead>
<tr>
<th>Health Science Orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informatics / Health Information Technology</td>
</tr>
<tr>
<td>Biomedical Research and Development</td>
</tr>
<tr>
<td>Support Services</td>
</tr>
<tr>
<td>Therapeutics and Diagnostics</td>
</tr>
</tbody>
</table>

### Pathways (e.g., High School)

| Informatics / Health Information Technology |
| Biomedical Research and Development |
| Support Services |
| Therapeutics and Diagnostics |

### Postsecondary Education and Training

- Bridge / Certificates and Associates / Bachelors / Graduate

### Careers

- Supply, Demand, and Other Labor Market Information Reports
  - Collection of reports highlighting cluster occupation profiles and Illinois school and program completers and links to related labor market information reports.

- Search All Courses and Credentials
  - Search for a specific course or credential or list of courses/credentials.
<table>
<thead>
<tr>
<th>Resource</th>
<th>Key Feature</th>
<th>Website Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>pathways resource center</td>
<td>Resources for development and implementation of STEM programs of study</td>
<td><a href="http://pathways.illinois.edu/">http://pathways.illinois.edu/</a></td>
</tr>
<tr>
<td>Six guiding principles for implementation and evaluation of Programs of Study</td>
<td><a href="http://occrl.illinois.edu/files/Projects/perkins/POSguide.pdf">http://occrl.illinois.edu/files/Projects/perkins/POSguide.pdf</a></td>
<td></td>
</tr>
<tr>
<td>Methods, templates and tools to continuously improve programs of study.</td>
<td><a href="http://occrl.illinois.edu/projects/pathways/">http://occrl.illinois.edu/projects/pathways/</a></td>
<td></td>
</tr>
<tr>
<td>Resource</td>
<td>Key Feature</td>
<td>Website Address</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>ConnectEd</td>
<td>Programs of study from a “Linked Learning” perspective</td>
<td><a href="http://www.connectedcalifornia.org/">http://www.connectedcalifornia.org/</a></td>
</tr>
<tr>
<td>NRC CTE</td>
<td>Math Common Core Standards Lesson Plans</td>
<td><a href="http://www.nrccte.org/professional-development/math-cte.curriculum-maps">http://www.nrccte.org/professional-development/math-cte.curriculum-maps</a></td>
</tr>
</tbody>
</table>
Pathway Development Process in Rockford Public Schools

[Diagram with logos for College & Career Academies of Rockford: Auburn, East, Guilford, Jefferson, Roosevelt]
RPS 205
College & Career Academies

1. Small Learning Communities
2. College & Career Prep Curriculum for All
3. Integration with Business/Civic/Post-Secondary/Cultural Communities
**BAMIT:** Business, Arts, Marketing and Information Technology  
Pathways: Business, Accounting/Finance, Graphic Arts, International Studies, IT, Studio Art

**EMITT:** Engineering, Manufacturing, Industrial and Trades Technology  
Pathways: Architecture and Design, Engineering, Manufacturing Operations, Skilled Trades, Transportation Technologies

**HS:** Health Sciences  
Pathways: Health & Wellness and Medical Sciences

**HPS:** Human and Public Services  
Pathways: Education and Child Development, Environmental Sustainability, Human Services, Law & Public Safety, Performance Production, Performing Arts
<table>
<thead>
<tr>
<th>GRADE</th>
<th>English/ Language Arts</th>
<th>Math</th>
<th>Science</th>
<th>Social Studies/ Sciences</th>
<th>PE/Health</th>
<th>General Electives</th>
<th>Pathway Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>English 9</td>
<td>Algebra I Hon Geometry</td>
<td>Biology</td>
<td>World History</td>
<td>PE 9</td>
<td>Fine Arts Career/Tech Ed Foreign Languages Academic</td>
<td>Freshmen Seminar &amp; Elective</td>
</tr>
<tr>
<td>10</td>
<td>English 10</td>
<td>Geometry Hon Geo</td>
<td>Chemistry</td>
<td>Elective</td>
<td>PE10/</td>
<td>Fine Arts Career/Tech Ed Foreign Languages Academic</td>
<td>Pathway Course Year 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Algebra II Coll Algebra</td>
<td></td>
<td></td>
<td>Health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>English 11</td>
<td>Algebra II Coll Algebra</td>
<td>Physics</td>
<td>US History</td>
<td>PE</td>
<td>Fine Arts Career/Tech Ed Foreign Languages Academic</td>
<td>Pathway Course Year 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trigonometry Pre-Calculus Math Topics</td>
<td></td>
<td></td>
<td>Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>English 12</td>
<td>Elective</td>
<td>Elective</td>
<td>Econ-Gov</td>
<td>PE</td>
<td>Fine Arts Career/Tech Ed Foreign Languages Academic</td>
<td>Pathway Course Year 3</td>
</tr>
</tbody>
</table>
8TH GRADE

• Develop personal identity and esteem through interest inventories, skills assessments, and personal values analyses—Who Am I?
• Present long term financial and lifestyle goals—What Do I Want?
• Examine 16 Career Clusters and present research about a career of interest
• Develop a high school plan
• Explain process for graduating/accessing post secondary education/training

9TH GRADE

• Review 8th Grade work
• Compare and contrast potential careers
• Develop and present a 10 year plan—How Do I Get It?
• Continued development of goal setting and decision making skills
• Access/analyze information regarding post-secondary training/education
• Choose academy & pathway
• Prepare job applications and resumes
Classes

Core Curriculum - required for graduation, infused with Academy theme

Intervention Courses - support for student skill development in literacy and numeracy

General Electives - available to students in all Academies: fine arts, phys ed, foreign language, academic

College & Career Pathways - three-year sequence of coordinated elective courses unique to the pathways of each Academy; culminates in college experience and/or career certification
Core Course

Vertical & Diagonal Alignment
With College Readiness/Common Core

11th Grade
College Core

11th Grade
College Prep

11th Grade
College Now

10th Grade
College Core

10th Grade
College Prep

10th Grade
College Now

9th Grade
College Core

9th Grade College Prep

9th Grade
College Now
Accounting/Finance Pathway

CAREERS IN PLANNING AND RELATED SERVICES FOR FINANCIAL AND INVESTMENT PLANNING, BANKING, INSURANCE, AND BUSINESS FINANCIAL MANAGEMENT.

**High School Pathway Courses**

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Recommended Electives</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 Freshman Seminar</td>
<td>Beginning Computer Applications#</td>
</tr>
<tr>
<td>9 Semester Elective#</td>
<td>Entrepreneur</td>
</tr>
<tr>
<td>10 Business &amp; Tech Concepts*</td>
<td>Speech Communications</td>
</tr>
<tr>
<td>11 Accounting I*</td>
<td>Internship</td>
</tr>
<tr>
<td>12 Accounting II*</td>
<td>Financial Accounting (Rock Valley College Course)</td>
</tr>
</tbody>
</table>

*Articulation/dual credit agreement with RVC is pending. # Highly recommended for pathway.

**Possibilities After High School**

**Educational Opportunities**
- Associates Degree (two-year degree) from Rock Valley College or Rockford College:
  - Accounting Management
- Bachelor's Degree (four-year degree) from Rockford College, Northern Illinois University or Rasmussen College in:
  - Accounting
  - Actuarial Science
  - Finance
  - Public Accounting
- Master’s Degree (six-year degree) from Rockford College or Northern Illinois University in:
  - Accounting Science
  - Business Administration

**Occupations Relating to this Pathway**
- Abstractor
- Accountant
- Actuary
- Banker
- Bill and Account Collector
- Budget Analyst
- Commodities Representative
- Controller
- Credit Analyst
- Debt Counselor
- Economist
- Financial Analyst
- Financial Planner
- Foreign Exchange Manager
- Fund Raiser
- Insurance Broker
- Internal Auditor
- Loan Officer
- Non-Profit Manager
- Tax Examiner
- Title Researcher and Examiner
- Treasurer
- Trust Officer
- Underwriter

Graphic Design/Media Production Pathway

CAREERS CREATING VISUAL CONCEPTS TO COMMUNICATE IDEAS THAT INSPIRE, INFORM, OR CAPTIVATE CONSUMERS.

**High School Pathway Courses**

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Recommended Electives</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 Freshman Seminar</td>
<td>Intro to Graphic Design#</td>
</tr>
<tr>
<td>9 Semester Elective#</td>
<td>Intro to Art &amp; Design</td>
</tr>
<tr>
<td>10 Graphic Design I</td>
<td>Beginning Computer Applications</td>
</tr>
<tr>
<td>11 Graphic Design II</td>
<td>Studio Art I</td>
</tr>
<tr>
<td>11 Media Production I</td>
<td>Studio Art 2-D Design I, II</td>
</tr>
<tr>
<td>12 Graphic Design III</td>
<td>Internship</td>
</tr>
<tr>
<td></td>
<td>Web Design</td>
</tr>
<tr>
<td></td>
<td>Media Production II</td>
</tr>
<tr>
<td></td>
<td>Intro to Commercial Art (Rock Valley College Course)</td>
</tr>
<tr>
<td></td>
<td>Intro to Graphic Arts Tech (Rock Valley College Course)</td>
</tr>
<tr>
<td></td>
<td>Intro to Mass Communication (Rock Valley College Course)</td>
</tr>
</tbody>
</table>

*Articulation/dual credit agreement with RVC is pending. # Highly recommended for pathway.

**Possibilities After High School**

**Educational Opportunities**
- Associates Degree (two-year degree) from Rock Valley College in:
  - Graphic Arts Technology
  - Media Production Specialist
- Bachelor’s Degree (four-year degree) from Northern Illinois University in:
  - Communications/Media
- Master’s Degree (six-year degree) from Northern Illinois University in:
  - Communications
  - Animator
  - Computer Typography and Composition Operator
  - Desktop Publishing Specialist
  - Graphics Equipment Operator
  - Lithographer
  - Media Specialist
  - Paper Salesperson
  - Plate Maker
  - Pre-Production Technician
  - Printing Equipment Operator
  - Production Coordinator
  - Production Manager
  - Web Architect/Designer
  - Web Page Designer
10 BAMIT Accounting/Finance Pathway

Careers in planning and related services for financial and investment planning, banking, insurance, and business financial management.

High School Pathway Courses

<table>
<thead>
<tr>
<th>Year</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>• Freshman Seminar</td>
</tr>
<tr>
<td></td>
<td>• Semester Elective#</td>
</tr>
<tr>
<td>10</td>
<td>• Business &amp; Tech Concepts*</td>
</tr>
<tr>
<td>11</td>
<td>• Accounting I*</td>
</tr>
<tr>
<td>12</td>
<td>• Accounting II*</td>
</tr>
<tr>
<td></td>
<td>• Financial Accounting (Rock Valley College Course)</td>
</tr>
</tbody>
</table>

Recommended Electives

• Beginning Computer Applications#
• Entrepreneurship
• Speech Communications
• Internship


* Articulation/dual credit agreement with RVC is pending.  # Highly recommended for pathway
EMITT Manufacturing Operations Pathway

Careers in planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.

High School Pathway Courses

<table>
<thead>
<tr>
<th>Year</th>
<th>Required Courses</th>
<th>Recommended Electives</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>• Freshman Seminar</td>
<td>• Exploring Engineering#</td>
</tr>
<tr>
<td></td>
<td>• Semester Elective#</td>
<td>• Introduction to Industrial Technology and Engineering</td>
</tr>
<tr>
<td>10</td>
<td>• Intro to Industrial Technology &amp; Engineering</td>
<td>• Orientation to Transportation</td>
</tr>
<tr>
<td></td>
<td>• Orientation to Drafting</td>
<td>• Engineering Graphics</td>
</tr>
<tr>
<td>11</td>
<td>• Orientation to Manufacturing</td>
<td>• Internship</td>
</tr>
<tr>
<td>12</td>
<td>• Machine Tool I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Machine Tool II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Materials and Processes, Metrology, Manufacturing Processes (Rock Valley</td>
<td></td>
</tr>
<tr>
<td></td>
<td>College Course)</td>
<td></td>
</tr>
</tbody>
</table>


* Articulation/dual credit agreement with RVC is pending. #Highly recommended for pathway
Vision
Alignment Rockford envisions *all* students graduating from high school with marketable employment skills or enrolling in post-secondary education. They are eager to live, work, learn, create, and play in the Rockford Region as contributing adults.

Mission
Alignment Rockford’s mission is to *align community resources* in support of public school strategies to raise student achievement, improve the health and happiness of our children, and advance the economic and social well-being of our community.
Alignment Propositions

• District’s strategic plan is the connection between schools and community
• Apply resources that exist in the community
• Engage strategic problem-solvers in a disciplined process
• Systematically focus (align) resources on high-yield strategic needs and high-need groups
Resources

• Expertise, talent & time
• Political will
• Moral authority
• Organization services (public & private; for/not-for-profit)
• Space and location
• Events
• Funding leverage
Working Committee Process
Invitations to Participate™

- High School Redesign
- College & Career Readiness Councils / Academy Support Teams ITP™
- Teacher Site Visits ITP™
- 2012 Academy Expo
  - 64 careers exhibited by 280 volunteers
  - $107,000 value to RPS