

Iowa High School Course Offerings

This IPRO report examines upper-level math, upper-level science, and upper-level vocational educational course offerings for a sample of Iowa high schools. Information for the report was gathered in September, 2008.

Methodology

An Iowa Department of Education list of all high schools in Iowa was used to draw a sample of schools for this survey. Schools on the list were first divided into public and private high schools. Four categories of public schools were created based on enrollment figures for grades 9-11 and five high schools were randomly chosen from each group.

The largest enrollment category was 1100 and more. The schools chosen from this category (Cedar Rapids Kennedy, Dubuque Hempstead, Iowa City High, Muscatine, and West Des Moines Valley) are all in urban areas and we label this group “Very Large Urban High Schools.” The next category is high schools with 600 to 1099 students. The schools chosen (Ames, Cedar Falls, Cedar Rapids Prairie, Pleasant Valley, and Waukee) are all in urban areas and we label this group “Large Urban High Schools.” The next category is schools with 300 to 599 students. These schools (Central Dewitt, Denison, Norwalk, Williamsburg, and Winterset) are all in rural areas and we label this group “Large Rural High Schools.” Finally, five high schools were chosen with less than 300 students. These schools (Battle Creek-Ida Grove, Eagle Grove, Jesup, Madrid, and Solon) are all in rural areas and we label them “Small Rural High Schools.”

For the fifth category, five private schools with 157 to 309 students were chosen. These schools (Columbus, Davenport Assumption, Des Moines Christian, Iowa City Regina, and Sioux City Heelan) are in urban areas and we label them “Urban Private High Schools.”

The 25 schools were asked to provide upper-level math, science, and vocational course offerings. Ten schools provided information on both course offerings and enrollment, while fifteen schools provided only course offerings. In the analysis that follows, all data is presented on a per-semester basis. A complete listing of all upper-level math, science, and vocational education courses offered by the 25 schools is included in the appendix.

Math and Science Courses

The schools contacted were asked for information on the number of upper-level math and science courses offered and the enrollment in these courses. “Upper-level” was defined as any math course above Algebra II and any science course above introductory physics, chemistry or biology. If a school offered more than one section of a class in one semester, the sections are all counted as one course. However, the enrollment data for that course includes enrollment in all sections.

Vocational Courses

Only vocational courses listed as “10th Grade and above” that are not pre-requisites for upper-level courses are included. Many schools offered similar vocational courses at

different levels. For example, one school might offer “Accounting” in one semester and another school might offer “Accounting I & II” in two semesters. Since similar information is covered in these courses, unless a course was labeled Advanced or AP, it was counted as one. For enrollment information, the number of students in the highest course offered was used.

Findings

Table 1 presents data on the average number of upper-level math, science, and vocational courses offered each semester by the high schools in each of the five categories (the vocational courses are divided into three areas: business, consumer science and industrial technology). For example, the number 6.4 in the box in the upper left corner means that on average, very large urban schools offer 6.4 upper level math courses every semester. The key pattern in the table is that the number of upper-level math, science, and vocational courses generally decreases with decreasing school size.

Table 1: Average Number of Courses Offered¹

	Very Large Urban Schools	Large Urban Schools	Large Rural Schools	Small Rural Schools	Urban Private Schools
Upper-level Math	6.4	5.6	4.6	3.4	3.4
Upper-level Science	9.2	7.4	5.6	5.0	3.2
Upper-level Business	10.0	9.6	6.6	3.4	2.8
Upper-level Consumer Science	7.0	9.8	5.4	4.0	1.8
Upper-level Industrial Technology	17.8	9.8	9.2	8.0	2.2
Schools Included	1. Cedar Rapids Kennedy 2. Dubuque Hempstead 3. Iowa City High 4. Muscatine 5. WDM Valley	1. Ames 2. Cedar Falls 3. Cedar Rapids Prairie 4. Pleasant Valley 5. Waukeez	1. Central Dewitt 2. Denison 3. Norwalk 4. Williamsburg 5. Winterset	1. Battle Creek-Ida Grove 2. Eagle Grove 3. Jesup 4. Madrid 5. Solon	1. Columbus 2. Davenport Assumption 3. Des Moines Christian 4. Regina 5. Sioux City Heelan

¹ Central Dewitt High School, Denison High School, Eagle Grove High School, Jesup High School, Madrid High School, and Muscatine High School offer agriculture classes and these were categorized as industrial technology. Cedar Rapids is the only school that offers Informational Technology courses and these are categorized as business.

Table 2: Percentage of Students Enrolled in Courses
out of total enrollment (Grades 9-11)

	VLUHS WDM Valley	VLUHS Cedar Falls	LUHS Waukee	LRHS Williams- burg	LRHS Winterset	SRHS Solon	UPHS Davenport Assumption	UPHS Des Moines Christian	UPHS Sioux City Heelan
Upper-Level Math	23%	23%	20%	14%	18%	11%	28%	22%	8%
Upper-Level Science	33%	16%	9%	13%	20%	8%	19%	13%	6%
Upper-Level Business	27%	28%	22%	6%	16%	7%	12%	6%	0%
Upper-Level Consumer Science	25%	14%	13%	1%	10%	2%	0%	4%	0%
Upper-Level Industrial Technology	14%	19%	28%	12%	22%	6%	0%	0%	2%

*Where VLUHS = very large urban high schools; LUHS = large urban high schools; LRHS = large rural high schools;
SRHS = small rural high schools; UPHS = urban private high schools

Table 2 shows the percentage of students who are enrolled in upper-level math, science, and vocational courses for ten schools that provided enrollment data. These figures were determined by dividing the total number of students enrolled in a subject by the total enrollment of the school's 9-11 population. For instance, if school C (enrollment 100) offered 2 upper-level math courses, each with an enrollment of 5, its total enrollment in upper-level math was 10. The resulting percentage would be 10 students out of 100 total, or 10%.

The figure of 23% under Valley High School and upper-level math means that the number of students in upper-level math courses at Valley in the semester for which we have data was 23% of the total number of students in grades 9-11 at the high school. Generally, larger schools have a higher percentage of students enrolled in upper-level math, science and vocational courses, but this is not always the case. For example, Davenport Assumption, an urban private school, had a higher percentage of students enrolled in upper-level math courses than any other school.

Conclusion

According to the data collected, large high schools tend to offer more upper-level courses in math, science, business, family consumer, and vocational technology than small high schools. Likewise, the percentage of student enrolled in upper-level courses tends to be greater in large and urban high schools compared to small and rural high schools, but there are exceptions.

Iowa Law Regarding Advanced Coursework

Some high school students take higher level math, science, and vocational classes form colleges and universities. According to Iowa Code 282.26, "qualified high school student may attend advanced courses of academic instruction at the college or university" and "public school funds should not be spent for tuition".² Another way that students can take advanced courses not offered at their high school is online through the Iowa Online AP Academy.

² Iowa Code of Law. High School Students Attending Advanced Courses, § 282.26.

Appendix

The following is a list of all upper-level math, upper-level science and vocational education courses offered by the 25 randomly selected schools. Any enrollment information provided by the schools is also included. Schools are listed alphabetically by size (Large Urban, Large Rural, Large Urban, and Small Rural). The number of students in a school (grades 9-11) is listed after the school's name.

Very Large Urban High Schools

Cedar Rapids Kennedy – 1376 students

Math – 5 courses

AP Calculus

AP Statistics

Advanced Pre-Calculus

Pre-Calculus

Statistics

Science – 14 courses

AP Biology

AP Chemistry

AP Environmental Science

AP Physics B

AP Physics C

Astronomy

Botany

Ecological Problems

Field Biology

Foundations of Science

Geology

Oceanography

Meteorology

Principles of Technology

Business – 4 courses

Entrepreneurship

Keyboarding 1

Money Management

Personal Finance

Consumer Science – 5 courses

Family & Consumer Science

Foods & Nutrition

Independent Living

Parenting Pre-School Children

Parenting School-Age Children

Industrial Technology – 12 courses

Advanced Auto Technology
Building Trades
Collision
Computer Assisted Drafting
Construction Technology
Electric Car
EMT/Medical Technology
Health Occupations
Page Layout/Photoshop
Principles of Technology
Welding
Wood Technology

Dubuque Hempstead – 1377 students

Math – 8 courses

Advanced Physics & Pre-Calculus
AP Calculus
AP Statistics
Consumer Math
Contemporary Math with Trigonometry
Honors Algebra II
Intro to Computer Science
Pre-Calculus & Trigonometry

Science – 10 courses

Advanced Physics/Pre-Calculus
Anatomy & Physiology
AP Biology
AP Chemistry
Astronomy
Environmental Science
Honors Biology
Principles of Technology
Marine Biology
Science for the 21st Century

Business – 16 courses

Accounting
Advanced Accounting
Business Start Up/Management
Business Technology
Business Training
Cooperative Education/Internship

Keyboarding Plus
Marketing Education
Microsoft Excel/Access
Microsoft Word
Money Management
Multi Media
Note-Taking
Personal & Business Law
Personal Finance
Sales/Advertising

Consumer Science – 12 courses

Careers in Action
Clothing & Design
Food
Food Careers
Foods & Family
Health & Careers
Housing Interior Design
International Foods
Life Management
Nutrition
Parenting
Personal & Family Services

Industrial Technology – 24 courses

Applied Technology
Architectural CAD
Auto Care & Maintenance
Auto Chassis Service
Auto Diagnostics
Cabinetmaking
CAD
CISCO Networking
Computer Technical Drafting
Electricity
Exploration in Technology
General Metals
House Project
Industrial Plastics
Manufacturing & CNC
Modern Machining Technology
Pre-Engineering Concepts
Principles of Technology
Small Engine Design & Testing
Small Engine Repair

Web Creations/Graphics
Welding
Woodworking/Construction
Video Production

Iowa City High – 1065 students

Math – 9 courses

AP Calculus AB
AP Calculus BC
AP Statistics
Advanced Computer Programming
Art of Mathematical Problem Solving
Consumer Mathematics
Core-Plus
Intro to Computer Programming
Pre-Calculus

Science – 8 courses

Advanced Honors Biology
Advanced Honors Chemistry
Ecology
Environmental Analysis
Honors Chemistry
Honors Physics
Physical Geology
Weather & Climate

Business – 11 courses

Advanced Accounting
Advanced Computer Technology
Business Law
Career Academy
Computer Technology
Entrepreneurship
General Business
Personal Finance
Keyboarding
Marketing
Professional Pathways

Consumer Science – 7 courses

Child Development
Creative Fabrics
Foods
Interior Design

On Your Own
Relationships

Industrial Technology – 17 courses

Advanced Manufacturing
Advanced Manufacturing
Fundamentals of CAD
Home Construction
Home Improvement
Information Technology - Networking
Introduction to Engineering Design
Manufacturing with Metals
Manufacturing with Woods
Principles of Engineering
Woods Technology

Muscatine - 1293 students

Math – 6 courses

AP Calculus
Cognitive Algebra
Consumer Math
Pre-Calculus
Principles of Engineering
Probability & Statistics

Science – 7 courses

AP Environmental Science
AP Physics
Biochemistry
Earth Science
Horticulture
Human Anatomy & Physiology
Organic Chemistry

Business – 7 courses

AP Macro Economics
AP Micro Economics
Business & Personal Law
Business-Based Learning
Computer Accounting
Marketing
Microsoft Office Applications

Consumer Science – 5 courses

Contemporary Living

Culinary Arts Youth Apprenticeship

Housing

Parenting

Safety & Sanitation

Industrial Technology – 24 courses

Advanced Automotive Technology

Advanced Welding

Cabinetmaking

Car Care

Carpentry

Cisco Router Technology

Civil Engineering & Architecture

Computer Aided Drafting

Computer Aided Manufacturing

Intro to Engineering & Design

Industrial Tech Work-Based Learning

Manufacturing

Power Mechanics

Principles of Engineering

Residential Wiring

Welding Technology

Wood Technology

Agriculture courses

Advanced Forestry

Agriculture Work Based Learning

Ag Summer Work Experience

Animal Science

Forestry & Wildlife Management

Horse Science & Evaluation

Horticulture

West Des Moines Valley – 1972 Students

Math - 4 courses

Algebra 2 & Trigonometry - 184

AP Calculus - 32

Pre-Calculus - 138

Trigonometry - 33

Statistics - 72

Total Math Enrollment – 459/1972 Total Students = 23%

Science - 7 courses

AP Biology – 66

AP Chemistry – 113
AP Physics - 42
Astronomy -109
Geology – 53
Mankind & Environment – 123
Plant Science – 149
Total Math Enrollment – 655/1972 Total Students = 33%

Business - 12 courses

Accounting – 16
Advanced Personal Computer Applications – 21
Advanced Programming in BASIC – 32
AP Computer Science – 10
Business & Computer Analysis – 27
Business Keyboarding – 22
Business Law – 30
Financial Management – 69
Intro to Business – 87
Marketing & Sales – 60
Sports & Entertainment Marketing – 76
Web Page Design - 23
Total Business Enrollment – 543/1972 Total Students = 27%

Consumer Science – 6 courses

Creative Sewing – 80
Fashion – 96
Foods – 146
Human Development – 59
Interior Design – 56
Personal & Family Living - 63
Total Consumer Science Enrollment – 500/1972 Total Students = 25%

Industrial Technology – 12 courses

Advanced Power Tool Woodworking – 17
Advanced Metal Working – 9
Architectural Design – 22
Automotive Power Trains – 40
Automotive Systems – 38
Construction Technology – 6
Home Repairs, Remodeling & Building – 59
Mechanical CAD 1 -33
Mechanical CAD II – 15
Mechanical CAD III – 10
Mechanical CAD 4 – 9
Survey of Engineering – 21
Total Industrial Tech Enrollment – 279/1972 Total Students = 14%

Large Urban High Schools

Ames High School – 1087 Students

Math – 6 courses

AP Calculus AB
Applied Math
Integrated Math
Pre-Calculus
Statistics
Trigonometry

Science – 6 courses

AP Biology
AP Chemistry
AP Physics
Earth Science
Principles of Chemistry
Survey of Biology

Business - 7 courses

Accounting
Business Law
Computer Concepts
Business Law
Intro to Business
Marketing Cooperative Internship
Marketing Education

Consumer Science – 8 courses

Advanced Foods
Child Development
Contemporary Living
Fashion Merchandising
Foods & Nutrition
Housing & Interior Design
Parenting
Textiles & Clothing

Industrial Technology - 6 courses

Architectural Research
Automotives
CADD
Multi-Occupation Cooperative Internship
Wood Materials

Woodworking

Cedar Falls – 1029 Students

Math – 8 courses

AP Calculus - 34

Hawkeye Community College Math for the Liberal Arts - 7

Hawkeye Community College Statistics - 40

Honors Algebra II & Trigonometry - 55

Honors Pre-Calculus - 23

Introduction to Programming – 5

Mathematics for Daily Living - 72

Pre-Calculus - 38

Total Math Enrollment - 236/1029 Total Students = 23%

Science – 9 courses

AP Biology - 13

AP Chemistry – 2.50

Anatomy & Physiology - 23

Astronomy/Meteorology - 19

Ecology - 20

Geology - 12

Hawkeye Community College Physics - 14

Microbiology - 11

Social Issues in Biology - 48

Total Science Enrollment - 162.5/1029 Total Students = 16%

Business – 13 courses

Accounting - 7

Advanced Computer Projects - 1

Business Skills - 0

Computer Applications - 53

Entrepreneurship - 32

Exploring the World of Work - 12

Hawkeye Community College Business Law - 31

Hawkeye Community College Concepts & Applications - 13

Hawkeye Community College Intro to Business - 57

Keyboarding - 6

Personal Finance - 56

Sales & Marketing Concepts – 13

Web Design & Publishing - 11

Total Business Enrollment – 292/1029 Total Students = 28%

Consumer Science – 12 courses

Adult Living - 7

Child Development - 26

Fashion Merchandising - 13
Foods & Nutrition - 111
Hawkeye Community College Growth & Development - 7
Hawkeye Community College Introduction to Health Careers - 23
Hawkeye Community College Nurse Aide/Orderly - 9
Health Occupations - 9
Interior Design – 17
Total Consumer Science Enrollment – 222/1029 = 22%

Industrial Technology – 9 courses
Advanced Auto Mechanics - 22
Architectural Drawing & Design - 5
Construction Technology - 10
Consumer Auto Mechanics - 18
Energy & Power Technology - 0
Engineering Drawing & Design - 2
Introduction to Robotics & Mechanics - 55
Metal Technology - 7
Wood Technology - 16
Total Industrial Technology Enrollment – 135/1029 Total Enrollment = 13%

Cedar Rapids Prairie – 939 Students

Math – 3 courses

AP Calculus
Pre-Calculus
Statistics

Science – 5 courses

Anatomy & Physiology
AP Biology
Basic Medical Language
Earth/Space Science
Horticulture

Business – 9 courses

Advanced Accounting
Business Law
Computer Business Applications
Entrepreneurship
Intermediate Computer Business Applications
Keyboarding
Marketing
Personal Finance
Word Processing

Industrial Technology – 13 courses

Advanced Manufacturing Processes
Automotive Technology
Biotechnical Engineering
Construction Systems
Digital Electronics
Electric Car
Home Construction
Intro to Industrial Technology
Intro to Engineering Design
Manufacturing Enterprises
Manufacturing Technology
Material Processes
Principles of Engineering

Informational Technology – 12 courses

Advanced Video
Applied Video Production
Broadcasting
Informational Technology Essentials
Networking
PC Hardware
PC Operating Systems
Prairie Computer Repair
Prairie Computer Technology
Programming Concepts
Web Design

Pleasant Valley – 764 Students

Math – 5 courses

AP Calculus
Advanced Algebra & Trigonometry
Consumer Math
Discrete Mathematics
Pre-Calculus

Science - 9 courses

Anatomy & Physiology
AP Chemistry
AP Physics
Environmental Science
Honors Biology
Honors Physics
Organic Chemistry/Microbiology
Pharmacology/Medical Terminology

Principles of Technology

Business – 11 courses

Accounting
Business Computer Applications
CISCO Networking Academy
Computer Science
Entrepreneurship Academy
Intro to Business
Java
Personal Finance
Principles of Marketing
Visual Basic
Webdesign with Frontpage

Consumer Science – 10 courses

Advanced Food Preparation
Culinary Arts Youth Apprenticeship Program
Guiding the Behavior of Children
Health & Safety of Children
International Cuisine
Intro to Baking
Intro to Fashion Merchandising
Intro to Interior Design
Parenting Skills
Relationships

Industrial Technology – 9 courses

Automotive Maintenance
Computer Aided Drafting
Construction Skills
Engineering Problems Academy
Intro to Industrial Technology
Metals
Principle of Technology
Transportation Technologies
Wood Production Processes

Waukee – 906 Students

Math – 4 courses

AP Calculus – 23
Pre-Calculus – 50
Probabilities/Statistics – 37

Trigonometry – 75

Total Math Enrollment – 185/906 per sem = 20%

Science – 3 courses

AP Biology - 7

AP Chemistry - 25

Human Anatomy - 51

Total Science Enrollment - 78/906 per semester = 9%

Business - 8 courses

Accounting – 36

Advertising – 30

Business – 40

Business Law – 17

Computer Applications – 37

Entrepreneurship – 37

Keyboarding – 17

Marketing – 40

Total Business Enrollment - 254/906 per semester = 28%

Consumer Science – 7 courses

Child Development – 13

Family Living – 13

Fashions - 20

Foods – 54

Housing/Interiors – 13

Pro Start – 14

Textiles & Clothing – 10

Total Consumer Science Enrollment - 126/906 per semester = 14%

Industrial Technology – 12 courses

Advanced CADD – 3

Architectural Drawing – 14

Construction – 16

Drafting – 6

Electricity – 6

Energy, Power & Transportation – 9

Engineering Design – 15

Machine Tooling - 9

Metals – 26

Principles of Engineering – 18

School to Work – 14

Woods – 12

Woodworking – 22

Total Industrial Technology Enrollment - 170/906 sem = 19%

Large Rural High Schools

Norwalk High School – 574 Students

Math - 5 courses

AP Calc AB

AP Calc BC

AP Probability & Statistics

Math III+

Math IV+

Science - 6 courses

AP Biology

AP Chemistry

Chemistry in the Community

Conceptual Physics

Life Science Foundations

Physics

Business - 3 courses

Business Law

Business Management

Principles of Selling and Marketing

Consumer Science - 5 courses

Accounting II

Advanced Computers and Web Page Design

Advanced Desktop Publishing

Children in Action

Desktop Publishing

Industrial Technology - 11 courses

Auto Mechanics II

Construction Technology

Electricity

Electronics

Manufacturing II

Pre-architectural Studies

Pre-architectural Studies II

Pre-engineering Studies

Pre-engineering Studies II

Power and Energy

Woods Production II

Central DeWitt – 428 Students

Math – 2 courses

AP Calculus
AP Statistics

Science -4 courses

Anatomy and Physiology
Earth Science
Environmental Science
Physics

Business – 5 courses

Accounting II
Personal Finance
Business Concepts
Business Law
Computer Applications II
Personal Finance

Consumer Science – 7 courses

Chef Youth Apprentice
Child Development
Foods and Nutrition II
Housing & Home Furnishing
Human Relations
Meal Management II
Safety & Sanitation

Industrial Technology – 7 courses

Auto Maintenance
Machine Drafting
Mechanical Drafting
Principles of Technology II
Woodworking II

Agriculture - 2 courses

Advanced Agricultural Science & Technology
Agricultural Science II

Denison High School – 525 Students

Math - 4 courses

Math Analysis
Math Fundamentals
Pre-Calculus
Probability and Statistics

Science - 4 courses

Advanced Chemistry
Anatomy & Physiology
Global Perspectives
Physics

Business – 8 courses

Accounting II
Accounting III
Advanced Web Design
Business Law
Entrepreneurship
Personal Finance
Principles of Investing
Sports & Entertainment Marketing

Information Technology - 5 courses

Computer Networking/CISCO I
Computer Systems A+
Desktop Publishing/Video Editing
Fundamentals of C++
Technology Integration I

Consumer Science - 4 courses

Child Development II
Contemporary Living
Food & Nutrition II
Housing & Interior Design

Vocational Technology - 11 courses

Advanced Auto Body
Blue Print Reading
Car & Home Maintenance
Drafting Fundamentals
Electronics Fundamentals
Industrial Safety Electrical Systems
Industrial Safety Mechanical Systems
World of Construction

Agriculture courses

Agricultural Science II
Agricultural Science III
Agricultural Science, Technology, Marketing IV

Williamsburg High School – 314 Students

Math – 7 courses

AP Calculus AB – 3.5
AP Calculus BC - 3
AP Statistics - 4.5
Finite Math – College Credit (no longer offered)
Functions, Stats and Trigonometry – 17
Math & Society – College Credit - 2.5
Pre-calculus, Discrete Math – 13.5
Total Math Enrollment - 44/314 semester = 14%

Science - 8 courses
Advanced Agricultural Mechanics – not teaching
AP Biology – 5
AP Chemistry - 2.5
AP Physics - .5
Horticulture II - 4.5
Human Anatomy & Physiology - 18
Principles of Technology I - 6
Principles of Technology II- 4
Total Science Enrollment – 40.5/314 semester = 12.89%

Business – 8 courses
Accounting II – not teaching
Advanced Word Processing – College Credit – 12
AP Economics – 2.5
Desktop Publishing - 3
Intro to Computers – not teaching
Intermediate Computer – not teaching
PowerPoint Multimedia – not teaching
Web Design Principles – not teaching
Total Business Enrollment – 17.5/314 semester = 5.57%

Consumer Science - 1 course
Family and Consumer Sciences Small Business – 6
Total Consumer Science Enrollment- 6/314 semester = 1.19%

Industrial Technology – 7 courses
Advanced Construction – not teaching
C.A.D III – not teaching
C.A.D IV – not teaching
House Construction/Building Trades – not teaching
Metals II – 10
Welding II - 7
Woodworking II - 20.5
Total Industrial Technology Enrollment- 37.5/314 semester = 11.94 %

Winterset High School – 401 Students

Math – 5 courses

Advanced Math – 33

AP Calculus - 11

AP Statistics – not teaching

Discrete Math – 11.5

Probability & Statistics - 17

Total Math Enrollment- 72.5/401 semester = 18.08%

Science – 6 courses

Anatomy & Physiology - 28

AP Biology – 8.5

Biotechnology - 8.5

Earth & the Environment - 8

Microbiology - 12.5

Physics - 16

Total Science Enrollment - 81.5/401 semester = 20.32%

Business – 9 courses

Accounting II - 17

Accounting III - 4.5

Accounting IV - 3.5

Advanced Computer Application - 4

Desktop Publishing -5.5

Marketing Principle Selling - 4

MOC Job Experience – 12.5

Principles of Marketing - 5.5

WHS-TV Business- 7

Total Business Enrollment- 63.5/401 semester = 15.84%

Consumer Science – 6 courses

Advanced Cooking - 14

Advanced Textile & Clothing Construction - 1.5

Basic Independent Living - 10

Child Development & Parenting - 3.5

Family Living - 3

Occupational Foods - 10

Total Consumer Science Enrollment- 42/401 semester = 10.47%

Industrial Technology – 10 courses

Building Construct I & II - 20

C.A.D Architectural - 8

C.A.D Mechanical - 5

Cabinet Making - 16

Graphics II - 8

Metals Technology II - 6

Residential Wiring - 3
Senior Independent Project – 5
Welding Technology - 4
Wood Tech II - 15
Total Business Enrollment- 90/401 semester = 22.44%

Urban Private High Schools

Columbus High School – 311 Students

Math - 4 courses

Accelerated Pre-Calculus
AP Calculus
Modern Analysis
Tutorial Math

Science - 5 courses

Applied Principles of Technology
Applied Scientific Analysis
Astronomy & Meteorology
Field & Stream
Human Biology

Business - 3 courses

Accounting II
Accounting III
Accounting IV

Family Consumer - 5 courses

Child Development
Fashion Merchandise III
Fashion Merchandise IV
Food & Nutrition II
Independent Living & Wellness

Vocational Technology - 7 courses

Advanced Metalworking
Advanced Power Mechanics: Engines
Advanced Power Mechanics: Power Trains & Suspensions
Advanced Woodworking
Independent Study: Metals
Independent Study: Power Mechanics
Independent Study: Woodworking

Davenport Assumption High School – 309 Students

Math-4 courses

AP Calculus - 14

Algebra- college credit - 22.5

Honors Pre-Calculus - 47

Statistics (College Credit) - 3.5

Total Math Enrollment- 87/309 semester = 28.16%

Science-4 courses

Anatomy & Physiology - 33

AP Biology - 20

AP Chemistry – 4.5

AP Physics –online – 1.5

Total Science Enrollment - 59/309 semester = 19.09 %

Business-4 courses

Marketing - 12

Advanced Computer Applications - 14

Web Page Design -7

Visual - 2.5

Total Business Enrollment- 35.5/309 semester = 11.89 %

Family Consumer - 0 courses

Total Family Consumer Enrollment- 0/309 semester = 0.00 %

Vocational Technology - 0 courses

Total Vocational Technology Enrollment- 0/309 semester = 0.00 %

Des Moines Christian - 123 Students

Math - 3 courses

AP Calculus AB - 3.5

Integrated Math (Trigonometry & Geometry) – 15

Pre-Calculus – 8.5

Total Math Enrollment - 27/123 semester = 21.95 %

Science - 3 courses

Anatomy - 6

Physics - 4.5

Physiology - 6

Total Science Enrollment - 16.5/123 semester = 13.41 %

Business - 2 courses

Computer Graphics – 4.5

Computer Programming - 2.5

Total Business Enrollment- 7/123 semester = 5.69 %

Family Consumer - 1 course

Family Consumer Science- 5

Total Family Consumer Enrollment- 5/123 semester = 4.07 %

Vocational Technology - 0

Total Vocational Technology Enrollment- 0/123 semester = 0.00 %

Iowa City Regina High School – 216 Students

Math - 2 courses

AP Calculus

High School Calculus

Science - 1 course

AP Biology

Business - 5 courses

Accounting II

Business Education

Business Law

Economics & Marketing

Personal Finance

Family Consumer - 3 courses

Creative Foods

Food & Nutrition

Parent Education

Vocational Technology-0 courses

Sioux City Heelan High School – 413 Students

Math - 4 courses

Advanced Math Concepts - 8

Calculus - 9

Math Analysis - 8

Math Analysis Honors - 9

Total Math Enrollment- 34/413 semester = 8.23%

Science - 3 courses

Biotechnology - 8

Honors Physics - 9

Honors Science - 8 courses

Total Science Enrollment- 25/413 semester = 6.05%

Business - 0 courses

Total Business Enrollment- 0/413 semester = 0.00%

Family Consume - 0 courses

Total Family Consumer Enrollment- 0/413 semester = 0.00%

Vocational Technology - 4 courses

Auto Body II - 3

Graphic Arts - 2

Health Occupations II - 2

Welding & Machine Technology - 2

Total Math Enrollment- 9/413 semester = 2.18%

Small Rural

Battle Creek-Ida Grove High School – 170 Students

Math - 3 courses

AP Calculus I

Functions, Statistics and Trigonometry

Integrated Math II

Science - 6 courses

AP Biology

AP Chemistry

Human Anatomy & Physiology

Physics

Technology Plus

Technology Plus II

Business - 5 courses

Business Computers

Electronic Publishing

Keyboarding II

Marketing

Multimedia

Consumer Science - 2 courses

Family Living

Independent Studies in Family & Consumer Sciences

Industrial Technology - 3 courses

Drafting II
Electricity
Introduction to Automotive Technology (College credit)

Eagle Grove High School – 227 Students

Math - 5 courses

Pre-Calculus
Statistics
Transition Math II
Transition Math III
Trigonometry

Science - 5 courses

Advanced Biology
Anatomy and Physiology
Earth Science
Environmental Science
Physics

Business - 4 courses

Business Professionalism
Computerized Accounting
Marketing Management
Multimedia

Consumer Science - 7 courses

Child Development
Developmental Psychology
Family & Consumer Sciences Independent Study
Food & Fitness
Food Fundamentals II
Interior Design
Sewing & Construction

Vocational Technology - 3 courses

Construction Technology
Shielded Metal Arc Welding
Woods II

Agriculture - 5 courses

Agricultural Business II
Agricultural Mechanics
Horticulture
Landscaping
Natural Resources

Jesup High School – 209 Students

Math - 5 courses

Accelerated Algebra
Discrete Math & Statistics
Pre-Calculus & Trigonometry
Calc I –college credit
Calc II –college credit

Science - 4 courses

Anatomy & Physiology
Earth Science
Environmental Science
Physics

Business - 4 courses

Accounting II
Advanced Computer Literacy
Business Procedures
Computerized Accounting

Family Consumer - 4 courses

Child Development
Clothing & Textiles II
Family Relations
Food & Nutrition II

Vocational Technology - 6 courses

Construction Technology
Industrial Technology II
Machine Metals
Metals Technology

Agricultural Education III
Agricultural Education IV

Madrid High School – 125 Students

Math - 2 courses

Pre-Calculus
Statistics

Science - 4 courses

Anatomy
Environmental Science
Physical Science

Physics

Business - 0 courses

Family Consumer - 6 courses

Child Development

Fashion & Textiles

Foods & Nutrition I & II

Healthy Life Skills

Housing & Interior Design

Parenting & Family Living

Vocational Technology - 18 courses

Architectural Drawing

Construction Technology

CAD- 3D

Car Care

Drafting II

Energy

Manufacturing II

Manufacturing III

Manufacturing Enterprise

Principles of Technology II

Principles of Technology III

Power Technology

Solid Modeling

Technical Woodworking II

Agriculture - 4 courses

Advanced Animal Science

Agricultural Construction

Agronomy & Soils

Wildlife Management & Natural Resources

Solon High School – 295 Students

Math - 2 courses

Honors Calculus - 15.5

Statistics & Discrete Math - 17.5

Total Math Enrollment - 33/295 semester = 11.19%

Science - 6 courses

Advanced Chemistry - 14

Advanced Biology-Zoology –not teaching

Advanced Biology- Botany –not teaching

Advanced Biology-Microbiology –not teaching

Anatomy & Physiology -11

Forensic Science- not teaching

Total Science Enrollment- 25/295 semester = 8.47%

Business - 4 courses

Desktop Publishing – (College Credit) - 4.5

Entrepreneurship - 3

Marketing and Consumer Behavior - 3

Webpage Design (College Credit) - 9

Total Business Enrollment - 19/295 semester = 6.61%

Family Consumer - 1 course

Advanced Foods - 7

Total Family Consumer Enrollment - 7/295 semester = 2.37%

Vocational Technology - 4 courses

Advanced Woodworking - 8

Building Trades - 2

Cabinet Making - 3.5

CAD II - 3.5

Manufacturing – not teaching

Total Vocational Technology Enrollment- 17/295 semester = 5.76%