

# **CAREER TECHNICAL EDUCATION**

## **PROGRAM OFFERINGS**

SOUTHEAST MACOMB CONSORTIUM  
SOUTHWEST MACOMB CONSORTIUM  
GOLIGHTLY CAREER & TECHNICAL CENTER

**Grosse Pointe High Schools**

# Career Technical Education Program Offerings

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## Introduction

To Students and Parents,

The purpose of this booklet is to answer questions that students, parents, and others may have about the various Career/Technical Education courses offered through the Southeast and Southwest Macomb Technical Consortium and Golightly Career & Technical Center. There are many Career/Technical programs available to you. Courses listed will include the following information: course location, program length, credits earned, grade level offered and a brief course description.

The Vocational programs are open to **all** 11<sup>th</sup> and 12<sup>th</sup> graders. Most programs are two years.

Students can select a career vocational/technical program regardless of where it is located in the Consortium. Academic technical support and transportation services may be available to special education students. Regular education students must provide their own transportation.

For additional information or for assistance with regard to the content of this booklet, please contact your high school counseling center or the Grosse Pointe Public Schools' Transition Services Department located at Grosse Pointe North High School, 313-432-3298 or 313-432-3301.

We encourage students to take advantage of the tremendous opportunities available to them during their high school years.

Students interested in applying to a consortium vocational program should contact their counselor or pick up an application from the counseling center or the Transition Services Department. Completed applications are also to be submitted to the student's counselor or the Transition Services Department located at Grosse Pointe North High School.

Enrollment preference is given to students from the resident district first. Grosse Pointe School District students will then be considered for any remaining positions. If a program reaches enrollment capacity, counselors will decide which students will be enrolled. The decision will be based on the following:

- a) Career/Technical occupational goals
- b) Attendance record
- c) Performance in pre-career technical courses, when applicable
- d) Overall grade-point average
- e) General academic, physical and personal requirements of the occupation being considered

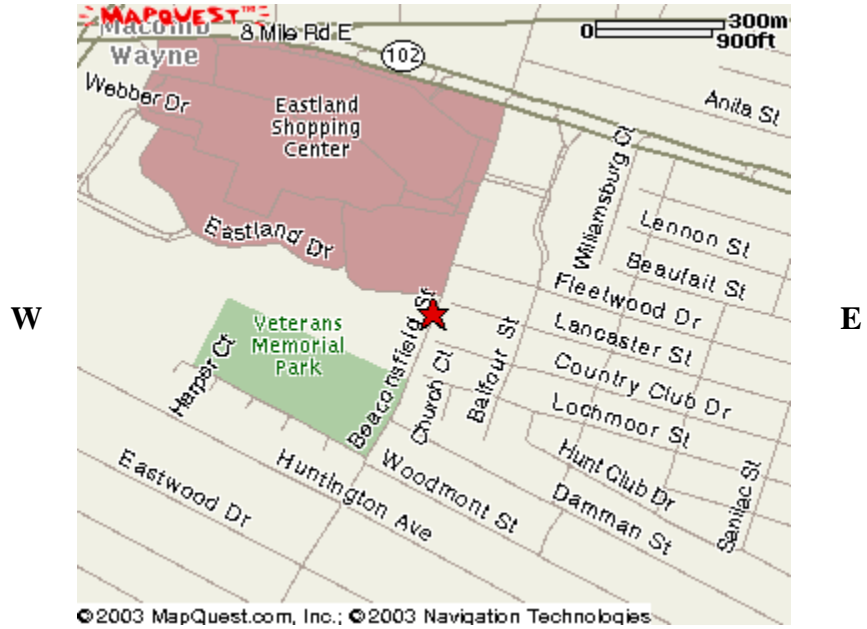
A student's Grosse Pointe high school class schedule may need to be adjusted to accommodate the vocational program hours. Students are expected to follow the vocational school calendar, as well as their high school calendar. This means that if Grosse Pointe schools has a day off, but the vocational school does not, Grosse Pointe students are expected to attend their vocational class. Also, if the vocational school has a day off, but Grosse Pointe does not, students are expected to attend their classes in Grosse Pointe. If you have any questions, please contact us at the numbers listed above.

Golightly Career & Technical Center  
900 Dickerson  
Detroit, MI 48215  
(313) 822-8820



Harper Woods High School  
20225 Beaconsfield  
Harper Woods, MI 48225  
(313) 839-7404

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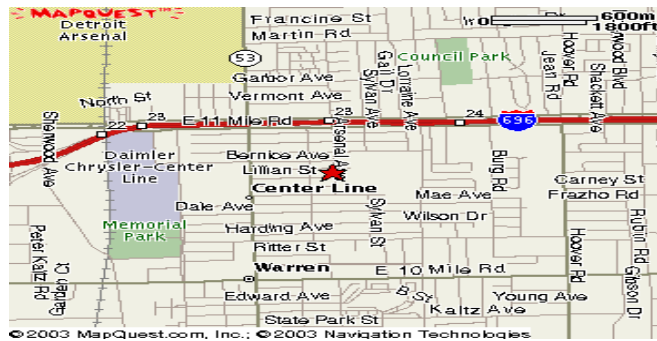
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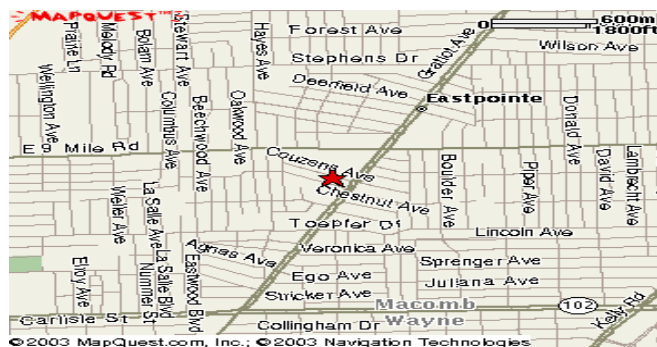
## Building Locations

Center Line High School  
26300 Arsenal Avenue  
Center Line, MI 48015  
(586) 757-6660



Located ½ mile south of I-696 and ½ mile east of Van Dyke

East Detroit High School  
15501 Couzens  
East Pointe, MI 48021  
(586) 445-4455



Located south of Nine Mile Road, west of Gratiot

Fitzgerald High School  
23200 Ryan Road  
Warren, MI 48091  
(586) 757-7070



Located north of Nine Mile Road on the east side of Ryan Road

Kramer Community Center  
8830 East Ten mile road  
Center Line, MI 48015  
(586) 756-6016



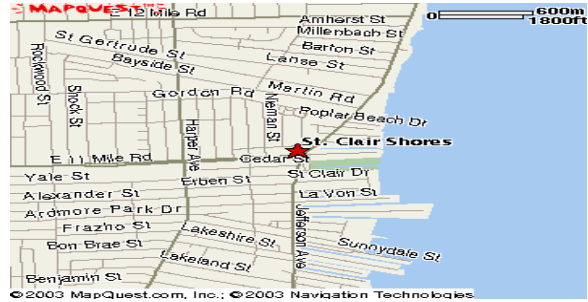
Located 1.2 mile east of Van Dyke, 1 block west of Lorraine, 1 block south of East Ten Mile Road

Lake Shore High School  
22980 Thirteen Mile road  
St. Clair Shores, MI 48082  
(586) 296-8240



Located on Thirteen Mile Road between Greater Mack and Jefferson

Lakeview High School  
2100 Eleven Mile Road  
St. Clair Shores, MI 48081  
(586) 445-4040



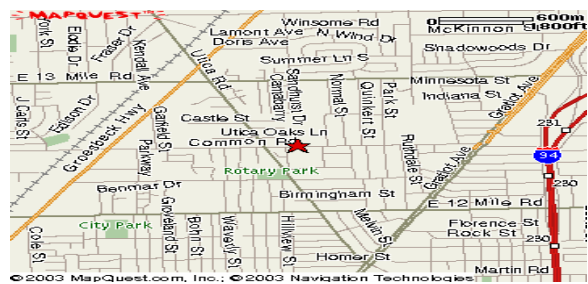
Located on Eleven Mile Road between Little Mack and Harper

Lincoln High School  
22900 Federal  
Warren, MI 48089  
(586) 758-8305



Located 2 blocks east of Van Dyke on Federal at Nine Mile Road

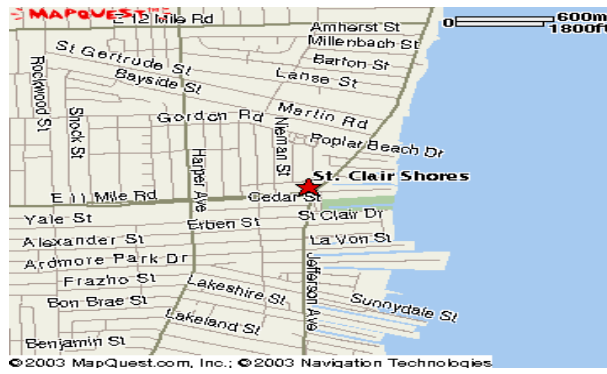
Roseville High School  
17855 Common  
Roseville, MI 48066  
(586) 445-5500



Located between Twelve and Thirteen Mile Roads, east of Utica Road

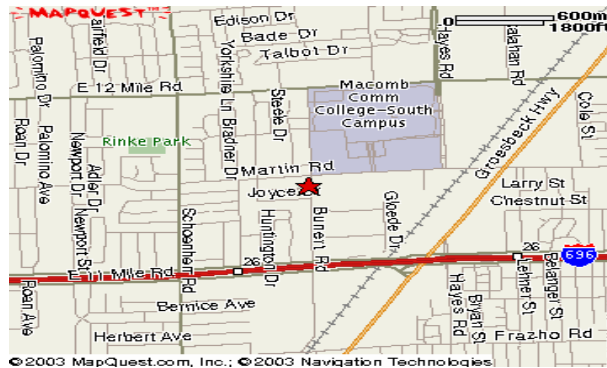
Building trades meets at Guest Community Center – See map and directions on page 8.

South Lake High School  
21900 Nine Mile Road  
St. Clair Shores, MI 48080  
(586) 445-4240



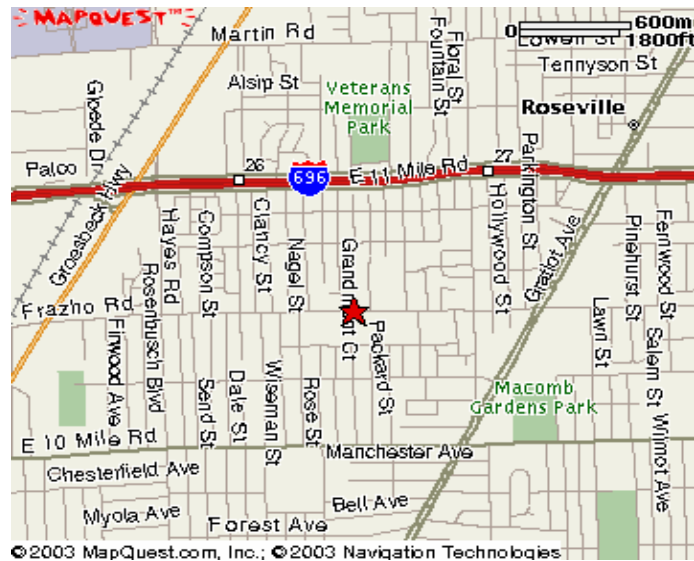
Located on Nine Mile Road between Harper and Greater Mack

Warren Woods Tower High School  
27900 Bunert  
Warren, MI 48093  
(586) 439-4402



Located 1/2 mile south of Twelve Mile Road on Bunert at Martin Road

Guest Community Center –  
Roseville Building Trades  
16221 Frazho Rd  
Roseville, MI 48066-5048



Located on Frazho (10 1/2 Mile) about 1/2 mile west of Gratiot. While class is held at Guest, the building site is located behind Guest Community Center off of Ridgemont (Cul de Sac)

Southeast Macomb – Technical Education Consortium

The following programs are available to students:

Sponsoring School Districts

PROGRAM	East Detroit	Harper Woods	Lake Shore	Lake View	South Lake	Rose ville
Adv. Machine Trades						X
Adv. Mfg. Tech.	X					
Auto Mechanics	X			X	X	X
Building Trades						X
Business Service Technology			X			
Cisco Computer Networking I & II					X	
Cosmetology – Virginia Farrell			X			
Dental Assistant			X			
Drafting / CAD		X	X			
Drafting & Design			X			
Health Occupations			X			
Hospitality Services	X				X	X
Marketing I & II					X	
Mfg. Technology			X			
Retail Management				X		
Trade & Industry Electronics				X		
Trade & Industry Graphic Arts					X	

Southwest Macomb – Technical Education Consortium

The following programs are available to students:

PROGRAM	Sponsoring School Districts			
	Center Line	Fitzgerald	Lincoln High Van Dyke	Warren Woods
Accounting & Computer Training	X		X	X
Allied Health Technology				X
Automotive Technology		X	X	
Building Construction Technology (Kramer)		X		
Building Maintenance (Kramer)		X		
Building Trades (Kramer)			X	
Cosmetology				X
Drafting / CAD	X			
Electronics				X
Foods / Hospitality			X	X
Manufacturing Technology	X			
Nail Technician				X
Transportation & Small Engine Technology	X			
Visual Imaging / Graphics	X			

Detroit Public Schools  
Golightly Career & Technical Center  
900 Dickerson  
Detroit, MI 48215  
(313) 822-8820

Dr. Laura Royster, Director

#### Trade & Industry

- Agriscience (Horticulture / Floriculture)
- Automotive Body Repair
- Automotive Technology
- Electronics
- Computer Aided Drafting
- Law Enforcement
- Machine Shop
- Mass Communications
- Small Engine & Marine Repair
- Welding & Cutting

#### Business Services & Technology

- Academy of Finance
- Academy of Travel & Tourism
- Call Center
- Computer Graphics and Publishing Technology (COMPUTEC)
- Academy of Information Technology (AOIT)

#### Hospitality & Food Services

- Hospitality & Food Services I
- Hospitality & Food Services II
- Baking and Pastry Arts
- Meat Cutting & Chacuterie

## BUSINESS EDUCATION

Business Service Technology  
Call Center (Customer Service Specialist)  
Cisco Computer Networking  
Computerized Graphics and Publishing Technology (COMPUTEC)  
Academy of Finance  
Academy of Information & Technology  
Marketing  
Retail Merchandising I, II, co-op  
Academy of Travel & Tourism

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Course Title: **Business Service Technology**

Course Number: **02874**

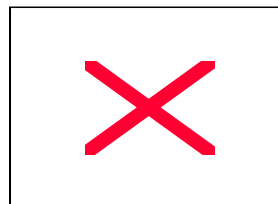
Location: Lake Shore High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: Should have knowledge of keyboard and previous business course.



BST is a full year class, two hours each day focusing on job-specific skills within a chosen field. Students will learn telephone skills, record management, basic computer applications, business math, and record keeping. The class will also include advanced computer projects using the internet, additional career planning, instruction in management accounting, job simulations, job shadowing and unpaid work studies. Twelfth grade will consist primarily of on the job work experience / cooperative education placement along with one hour of in class instruction.

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Course Title: **Call Center (Customer Service Specialist)**

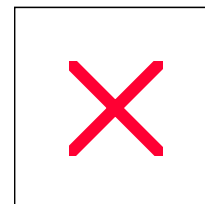
Location: Golightly Career & Technical Center

Length of Course: 1 year (2 year program), 2 ½ hour block

Credits Earned: 30

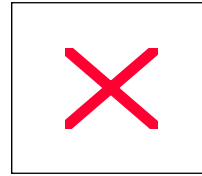
Grade Level: 11, 12

Prerequisites: None.



Students in the two year Call Center program are trained for entry-level positions as customer service specialists. Computer and basic business skills are retaught the first year. The second year students utilize an Automatic Call Distributor (ACD) to handle incoming calls, learn stress management, conflict resolution and other skills necessary to work in a call center. Students are qualified to work in areas of customer service, telemarketing, help desk, accounts receivable, market research and product support.

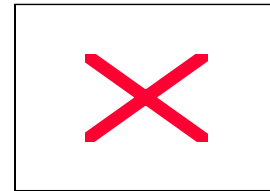
Course Title: **Cisco Computer Networking**  
Location: South Lake High School  
Length of Course: 1 year (2 year program), 2 hour block  
Credits Earned: 20  
Grade Level: 11, 12  
Prerequisites: None.



This Computer Networking program employs an e-learning model, using a combination of web-based, instructor-led learning and hands on labs that will teach high school students how to design, build and maintain computer networks of local, national and global businesses. This Computer Networking program will provide course work for a complete range of basic through advanced networking concepts – from pulling cable, through such complex concepts as sub net masking rules and strategies to troubleshooting. At the end of the student’s second year, the student will have the opportunity to write an Industry Standard Certification Exam that would qualify that student as a Cisco Certified Network Associate (CCNA).

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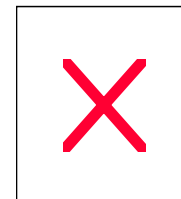
Course Title: **Computerized Graphics and Publishing Technology (COMPUTEC)**  
**Course Number: 01071**  
Location: Golightly Career & Technical Center  
Length of Course: 1 year (2 year program), 2 ½ hour block  
Credits Earned: 30  
Grade Level: 11, 12  
Prerequisites: None.



Students will be exposed to the Macintosh and IBM computer systems during this two year program. The students will become familiar with the computer applications associated with desktop software programs such as, Microsoft Word, Pagemaker, QuarkXpress, Photoshop, Paint and Tpestyler. Second year students are exposed to customer services skills in the Computer Customer Service Lab.

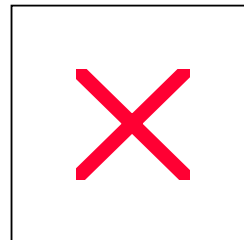
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Course Title: **Academy of Information Technology**  
**Course Number: 01069**  
Location: Golightly Career & Technical Center  
Length of Course: 1 year, (2 year program) 2 ½ hour block  
Credits Earned: 30  
Grade Level: 11, 12  
Prerequisites: None.



The demand for high-tech workers has increased rapidly and will continue to grow. This program, sponsored by the National Academy Foundation (NAF), will equip students with skills that will enhance their marketability in today’s workplace. It is strongly supported by a business and industry advisory board to ensure student’s readiness for the job market. Students will train in the following areas with an emphasis on the development of math, science, and technology skills, coupled with a paid summer internship after the first year: Computer Networking, computer Applications, A + and Microsoft Pre-Certification Training, Database Management, Web Mastering, Digital Media, Computer Information Systems.

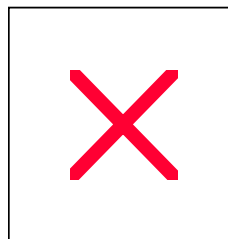
Course Title: **Academy of Finance**  
Location: Golightly Career & Technical Center  
Length of Course: 1 year (2 year program), 2 ½ hour block  
Credits Earned: 30  
Grade Level: 11, 12  
Prerequisites: None.



The Academy of Finance, the first in the Detroit Public School System and in the State of Michigan, provides students with an opportunity to develop a background in economics and the world of finance. The students perform basic office skills, manual and automated accounting functions to keep / prepare financial records of a business; use applied economic principles to make / solve everyday financial business decisions; prepare basic business documents using WordPerfect 6.0, Dbase and Lotus. The Academy of Finance Advisory Board, through their resources, give students the opportunity to participate in a paid internship before graduation.

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Course Title: **Marketing**  
Location: Southlake High School  
Length of Course: 1 year, 2 hour block  
Credits Earned: 20  
Grade Level: 11, 12  
Prerequisites: None.



The classroom hour includes a study of the many areas of marketing such as buying, selling, distribution, advertising, displays, inventory control, organization of a store and personal qualities for success. The laboratory hour includes all the operations necessary to run the school store.

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Course Title: **Retail Merchandising I**  
Location: Lakeview, South Lake  
Length of Course: 1 year, 2 hour block  
Credits Earned: 20  
Grade Level: 11  
Prerequisites: None.

Retail Merchandising I is a year long class in marketing and retail store operations. Students participate in the operation of the Husky Store for one period and in a classroom setting for one period in preparation for possible retail cooperation training (Co-op in the senior year.)

Course Title: **Retail Merchandising II**

Location: Lakeview High School, South Lake High School

Length of Course: 1 year, 2 hour block

Credits Earned: 10

Grade Level: 12

Prerequisites: Retail Merchandising I or Recommendation of instructor

This year long class is a continuation of Retail Merchandising I. It includes various combinations of subject matter and learning experience related to the functions of marketing, salesmanship, merchandising, advertising, and management.

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Course Title: **Retail Merchandising Co-op**

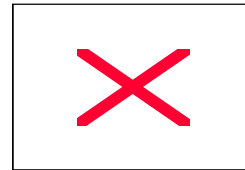
Location: Lakeview High School, South Lake High School

Length of Course: 1 year, 2 hour block

Credits Earned: 10

Grade Level: 11

Prerequisites: Concurrent enrollment in Retail Merchandising and recommendation of work study or co-op coordinator.



This course enables students to gain work experience being employed in a retail store.

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Course Title: **Academy of Travel and Tourism**

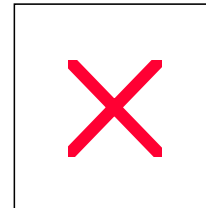
Location: Golightly Career & Technical Center

Length of Course: 1 year (2 year program), 2 ½ hour block

Credits Earned: 30

Grade Level: 11, 12

Prerequisites: None.



The Academy of Travel and Tourism Program offers students “a gateway to the travel industry.” The curriculum is complemented in its design by professionals in the industry who have diverse experiences in travel and tourism. This allows students to acquire immense information in the travel industry. The curriculum explores the areas of tour operator, cruise lines and airline careers.

After completion of this two year program, students are able to obtain an entry level career within the travel industry. Students’ skills are enhanced in the areas of customer service, computers, communication and geography. Through partnerships with NAF and local business industry, the program strives to build toward student success.

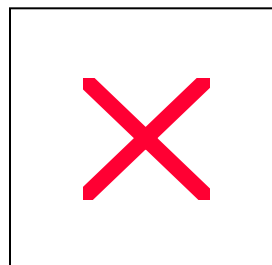
## PERSONAL SERVICES

Cosmetology I, II  
Nail Technician  
Hospitality Services I, II  
Foods / Hospitality I, II, III  
Food / Hospitality I Co-op  
Dining Room  
Beginning Main Kitchen  
Gourmet Kitchen  
Butcher Shop I, II, III, IV

Bake Shoppe I, II, III  
Health Occupation  
Medical Careers  
Nurse Assistant (AHT)  
AHT Advanced  
Health Services Co-op  
Medical Billing  
Dental Assisting, II, Co-op

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Course Title: **Cosmetology I, II**  
North Course Number: 01998  
Location: Virginia Farrel, Lake Shore High School  
Length of Course: 2 years (1 year each), 3 ½ hour block  
Credits Earned: 30 per year  
Grade Level: 11, 12  
Prerequisites: None for Cosmetology I.



The Cosmetology Program is designed for students with special interest in the area of cosmetology. Students accepted in this program will attend a commercial beauty school for 1,500 hours. All phases of the beauty industry will be studied. Upon successful completion, the student is qualified to take the State Board of Cosmetology Examination for licensing.

---

Course Title: **Cosmetology I**  
Course Number: 01998  
Location: Warren Woods Tower High School  
Length of Course: 1 year, 4 hour block  
Credits Earned: 30  
Grade Level: 11, 12  
Prerequisites: None.

Cosmetology is a State certified program that covers 2 years of comprehensive and involved instruction. The curriculum is set up by the Michigan State Licensing Board of Cosmetology and covers all areas of Cosmetology, theory and skill training. Upon completion of this course of instruction, the student is eligible to take the State Cosmetology examination for licensing (must be 17 years old). Once the student is licensed, they will be able to work in an established salon in the State of Michigan.

The Cosmetology program covers a two-year period and requires the completion of 1500 clock hours of training. Seniors will be allowed to enter Cosmetology I on an availability basis only. During the regular school year, students will attend 3 ½ hours per day, Monday-Friday either the morning session from 6:45-10:30 a.m. or the afternoon session from 11:45-3:15 p.m.

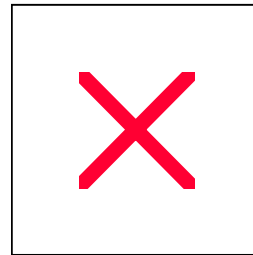
**Students will be required to spend an additional fourteen (14) days before the school year begins and fourteen (14) days at the end of the school year. This is required in the junior and senior year to complete the required 1500 clock hours of training in the two-year program. Days/Times will be determined on a year-to-year basis according to the school year calendar.**

Course Title: **Cosmetology II**  
Course Number: 01998  
Location: Warren Woods Tower High School  
Length of Course: 1 year, 4 hour block  
Credits Earned: 30  
Grade Level: 12  
Prerequisites: Cosmetology I.

Cosmetology II is the second year of the two year Cosmetology program.

---

Course Title: **Nail Technician / Manicurist**  
Course Number:  
Location: Warren Woods Tower High School  
Length of Course: 1 year, 2 hour block  
Credits Earned: 20  
Grade Level: 12  
Prerequisites: None.



This program includes 400 hours of classroom theory and practical skill training. The course will cover basic manicuring, hot oil manicuring, nail wrapping, artificial nail applications – both tips and acrylics, nail art – both flat and gems, air brushing and all new types of nail products such as air brushing, bonding, fiberglass, etc. At the end of the program the student will be prepared to take the State Board examination (must be 17 years old). Once the student is licensed they will be able to work in an established salon in the State of Michigan. The option is available to co-op in the senior year for those who complete the program in their junior year.

**Students may be required to spend additional time in the summer to complete the required 400 clock hours of training for completion of the program. Time will be determined on a year to year basis.**

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Course Title: **Hospitality Services**

Course Number: 01986

Location: Roseville High School, South Lake High School, East Detroit High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: None.

This course is designed to acquaint students with the career opportunities in the food service industry. Actual work experience is provided in many facets of the food services industry. Students operate a cafeteria and teachers' dining room at South Lake High School. This "learn by doing" experience covers areas dealing with sanitation, safety, use of commercial equipment, light food production (salads, sandwiches, bake shop) and techniques of food services. Emphasis is placed on the importance of developing good work habits and skills.

---

Course Title: **Hospitality Services II**

Course Number: 01986

Location: Roseville High School, South Lake High School, East Detroit High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: None.

This is a two hour, two semester course designed to advance the skills of students in commercial food preparation. The student gains an understanding of his/her abilities in relation to various restaurant jobs and knowledge of work and personal qualifications which are required at work stations. Awareness of procedures used in compiling orders, receiving and storing food supplies, planning menus, and costing of foods and expenses are experiences students will receive, as well as practical work experience in many phases of quality cooking at the Harper Woods High School cafeteria. Stress is placed on the importance of being dependable and of working efficiently.

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Course Title: **Foods / Hospitality**

Course Number: 01986

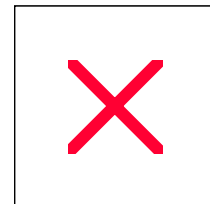
Location: Lincoln High School, Warren Woods Tower High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: None.



The first year Foods / Hospitality program is structured such that students will examine and gain competence in the common skills and knowledge of the travel, hotel / motel, and food service areas that comprise the hospitality industry. The program is taught at three locations in the school: classroom, commercial foods kitchen laboratory, and the Titan Terrace (Warren Woods Tower High School) or The Abe & I (Lincoln High School) Restaurants.

The objective of the course is for learners to take what they study in the classroom and apply it to both practical experiences and real life situations. The quantity food production component is practiced by running a luncheon restaurant in the Titan Terrace (Warren Woods Tower High

School) or The Abe & I (Lincoln High School) and catering various inside and outside of school activities during the year. The travel segment involves planning a one week travel itinerary using the hotel / motel computer simulations and complete the foods / hospitality industry study.

A student successfully completing this class will be ready to go on to the advanced Foods / Hospitality II course and a co-op job placement in their senior year.

---

Course Title: **Foods / Hospitality II, Advanced**

Course Number: 01986

Location: Lincoln High School, Warren Woods Tower High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 12

Prerequisites: Foods / Hospitality I.

The Foods / Hospitality II, advanced course will review and build on the skills learned in the beginning course. In addition to learning and practicing more advanced skills in the three areas of this industry, the student will be planning and supervising the running of the food service in the Titan Terrace Restaurant (Warren Woods Tower High School) or The Abe & I Restaurant (Lincoln High School) and the catering operations.

---

Course Title: **Foods / Hospitality III, Advanced**

Course Number: 01986

Location: Warren Woods Tower High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 12

Prerequisites: Foods / Hospitality I & II.

The Foods / Hospitality III course will review and build on the skills learned in the beginning courses. In addition to learning and practicing more advanced skills in the three areas of this industry, the student will be planning and supervising the running of the food service in the Titan Terrace Restaurant (Warren Woods Tower High School) and the catering operations.

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Course Title: **Foods / Hospitality I (Co-op related)**

Course Number: 01986

Location: Warren Woods Tower High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 12

Prerequisites: Student must have completed the beginning course in Foods / Hospitality and be enrolled in at least one hour of Foods / Hospitality II. A student without this prerequisite may enroll in Foods / Hospitality I and co-op **with the teacher's permission.**

Course Title: **Foods / Hospitality Co-op**

Course Number: 01986

Location: Warren Woods Tower High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 12

Prerequisites: Teacher permission.

Students with the desire to continue in any area of the Foods / Hospitality industry after graduation may apply for the co-op program. Personnel and management techniques are studied while the student works out in the field at a co-op job placement.

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Course Title: **Dining Room / Main Kitchen**

Course Number: 01986

Location: Golightly Career & Technical Center

Length of Course: 1 year (2 year program), 2 ½ hour block

Credits Earned: 30

Grade Level: 11,12

Prerequisites: None.

**Dining room:** Students gain actual knowledge in the Glass House Restaurant for entry-level positions in waiter / waitress, host / hostess, table bussing, cashier and table-side preparation.

**Beginning Main Kitchen:** Students gain actual knowledge in CG's Deli in short order / grill cooking, beverage / counter person and cashier.

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Course Title: **Gourmet Kitchen**

Course Number: 01986

Location: Golightly Career & Technical Center

Length of Course: 1 year, 2 ½ hour block

Credits Earned: 30

Grade Level: 11, 12

Prerequisites: None.

Students prepare soups, sauces, hot hors d'oeuvres and garnishes; learn meat carving and ice sculpting; serve gourmet buffets, daily a la carte / table side cooking and plate presentations.

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Course Title: **Butcher Shoppe I, II, III, IV**

Course Number: 01986

Location: Golightly Career & Technical Center

Length of Course: 1 year (2 year program), 2 ½ hour block

Credits Earned: 30

Grade Level: 11, 12

Prerequisites: None.

Students learn to operate commercial equipment, cut / bone meat, prepare and package meat, seafood, and poultry, prepare cold meat trays and handle customer concerns.

Course Title: **Bake Shoppe I, II, III, IV**

Course Number: 01986

Location: Golightly Career & Technical Center

Length of Course: 1 year (2 year program), 2 ½ hour block

Credits Earned: 30

Grade Level: 11, 12

Prerequisites: None.

Students learn safety and sanitation, prepare basic baked goods, breads and pastries, decorate special occasion cakes.

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Course Title: **Medical Careers**

Course Number: 01922

Location: Lake Shore High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: None.

Medical Careers is designed for students who will be pursuing a career in the medical field. Core skills include CPR, first aid, asepsis, disinfection and sterilization techniques, vital signs (blood pressure, pulse, temperature, respiration), safety, and basic human anatomy. Job specific skills for Physical Therapy Aide, or Occupational Therapy, Medical Assistant, Nursing Assistant, Dental Assistant and Surgical Technician are learned.

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Course Title: **Allied Health Technology Introduction**

Course Number: 01922

Location: Warren Woods Tower High School

Length of Course: 1 year, 1 hour block

Credits Earned: 10

Grade Level: 10, 11, 12

Prerequisites: None.

The Allied Health Technology (AHT) Introduction course introduces the student to a variety of medical careers. The student will have a basic understanding of the health care delivery system. The course will utilize speakers from various careers such as: Holistic Health, Governmental Health, Optical, Dental, Radiology and Dialysis. Students will learn basic medical terminology and abbreviations. CPR and First Aid Certification are offered.

Course Title: **AHT Skills (Nurse Assistant)**

Course Number: 01922

Location: Warren Woods High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: Students must have good communication skills, be adaptable to change, and be able to apply problem solving techniques. A good attendance record with responsible and mature conduct is required. The student must like working with people.

Allied Health Technology (AHT) Skills (Nurse Assistant) is a comprehensive study of the medical careers. The program covers all aspects of patient care from newborn to geriatrics. Basic human anatomy and pathophysiology are included. Upon completion of this course, a student of senior status is eligible to take the **Nurse Assistant Certification** examination. Students may choose co-op and can work mornings or afternoons. At the completion of this program, the student will be ready to assume a full time position. Students will be CPR/First Aid certified.

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Course Title: **AHT, Advanced**

Course Number: 01922

Location: Warren Woods Tower High School

Length of Course: 1 year, 1 hour block

Credits Earned: 10

Grade Level: 11, 12

Prerequisites: Completion of two (2) semesters of any Allied Health Technology course.

An Allied Health Technology (AHT) Advanced study of terminology. Includes advanced comprehensive study of anatomy and physiology. Students will perform special procedures such as Asepsis, Phlebotomy, CPR/First Aid and EKG. Students can choose to explore one or more careers with a professional mentor. Seniors can be on co-op.

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Course Title: **Health Services Co-op**

Course Number: 01922

Location: Warren Woods Tower High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 12

Prerequisites: Teacher permission.

Students with the desire can elect Health Services Co-op and work in various Allied Health Technology (AHT) areas.

Course Title: **AHT Unit Coordinator / Medical Billing**

Course Number:

Location: Warren Woods Tower High School

Length of Course: 1 year, 1 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: Students must possess good communication skills, like working with people, have a good attendance record, and be mature and reliable. Computer / keyboarding skills are a plus. Student must have legible handwriting and good spelling skills.

The Allied Health Technology (AHT) Unit Coordinator / Medical Billing program will prepare the student to be a Hospital Unit Coordinator or to work in medical offices / clinics. Activities will include transcription of physician's orders, receptionist and clerical duties, record keeping, filing, and other office procedures. Students will learn medical technology and abbreviations.

Seniors can choose to be on co-op, but they must agree to take the class for the entire year.

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### **EMERGENCY MEDICAL SERVICES – NEW Course**

(SMTEC: Center Line High School) - 2 credits, 1 year, Grade 12

This class is designed for students seriously interested in medicine – specifically emergency medicine. Students enrolled in this program will receive instruction in the fields of pre-hospital and emergency medical training. This program is an intense study of the human body and the treatment required outside the hospital setting. Students will receive intensive hands-on instruction in anatomy and physiology, emergency first aid, bleeding control, shock, cardiac arrest management, airway management, and patient treatment at accident scenes. Classroom study and hands-on practicals will challenge the student both academically and physically. Upon successful completion of the program through written, practical, and clinical performance objectives established by the Michigan Department of Consumer & Industry Services, students will be able to take the EMT-Basic state-licensing exam to become an Emergency Medical Technician (EMT). Students will be required to do clinical training in a hospital emergency room and an ambulance service.

**Prerequisite:** “B” average in Biology is recommended.

Students must submit an application and be accepted to take the class.

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Course Title: **Dental Assisting**

Course Number:

Location: Lake Shore High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: None.

This course prepared students for employment as a dental assistant. Skills learned will include dental terminology, dental anatomy, instrumentalization, sterilization of instruments, charting oral conditions, and mixing dental materials.

Course Title: **Dental Assistant II**

Course Number:

Location: Lake Shore High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: Dental Assisting.

Second year students will learn dental receptionist skills, first aid, CPR, dental laboratory skills, and working with stone, wax, and mouth guard material.

This program requires successful completion of Dental Assisting 9040 and instructor approval of this class as **it is not offered each year**. Counselors area advised to take note of this.

Course Title: **Dental Assistant Co-op**

Course Number:

Location: Varies

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 12

Prerequisites: Dental Assisting I, II.

This offers work-site experience in a dental office. Approval granted by instructor after successful classroom performance, good attendance, and professional behavior is mandatory.

## TRADE & INDUSTRY

Agriscience I, II, III, IV  
Auto Mechanics I, II, III, IV, V, VI  
Auto Tech II  
Auto Tech III  
Advanced Auto Tech I, II  
Automotive Tech I, II, III, IV, V  
Auto Body I, II, III, IV  
Automotive Service Technology I, II, III, IV  
Transportation and Small Engine Repair  
Small Engine and Marine Repair I, II, III, IV  
Building Construction Technology I  
Building Trades I, II  
Building Maintenance  
Building Trades  
Advanced Building Trades  
Drafting I CAD, II CAD, III CAD  
Computer Aided Drafting I, II, III, IV  
Drafting CAD I, II, Advanced  
Career Technical Education Drafting & Design I, II  
Electronic Technology  
Electronics I, II  
Electronics I, II, III, IV  
Trade & Industry Graphic Arts I  
Visual Imaging I, II  
Law Enforcement I, II, III  
Manufacturing Career & Technology Education  
Manufacturing Technology I, II, Advanced  
Machine Trades  
Welding and Cutting I, II, III, IV  
Machine Shop I, II, III, IV  
Mass Media Communications I, II, III, IV

Course Title: **Agriscience I, II, III, IV**  
North Course Number: 01997  
Location: Golightly Career & Technical Center  
Length of Course: 2 years, 2 ½ hour block  
Credits Earned: 30 per year  
Grade Level: 11, 12  
Prerequisites: None.

Students are introduced to the various fields of ornamental horticulture with an emphasis on plant growth and development; floral designs are created.

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Course Title: **Automotive Mechanics I, II**  
**Course number: 01987**  
Location: East Detroit High School  
Length of Course: 1 year, 2 hour block  
Credits Earned: 20  
Grade Level: 10, 11, 12  
Prerequisites: None.

This class is an introductory course to the automotive services field. The course content is divided into five major areas of instruction: hand tools, chassis, engines, engine support systems and automotive electrical systems. These areas will be covered by using textbooks, movies, teacher demonstrations, and overhead projections. (Students for the Advanced Vocational Course will be selected from these courses.)

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Course Title: **Automotive Mechanics III, IV**  
**Course number: 01987**  
Location: East Detroit High School  
Length of Course: 1 year, 2 hour block  
Credits Earned: 20  
Grade Level: 11, 12  
Prerequisites: Auto I, II and teacher recommendation.

This course is intended to prepare students for a career in the automotive service field. Students are exposed to a service garage atmosphere where customers' vehicles and donated vehicles, as well as spare parts/vehicle components are used for service and training experience using state of the art technical equipment.

Course Title: **Auto Mechanics V, VI**

**Course number: 01987**

Location: East Detroit High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 12, post graduated

Prerequisites: Auto III, IV.

This vocational program shows students the automotive service field and modern service equipment on an in-depth basis. There will be emphasis on engine overhaul and electronic ignition.

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Course Title: **Auto Tech II**

**Course number: 01987**

Location: Lakeview High School, South Lake High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: None.

This class can be for the vocationally-oriented student who is hoping to go into the automotive field or the student who is looking to become less dependent on others and learn how to save money and service his/her own car. This class gives an in-depth look at safety, tools, brakes, fuels and carburetion, ignition systems, tires, wheels, and suspension. This class will provide a time block to give students the needed experience for possible state licensing in some areas. It is presented in a hands-on manner with classroom discussion in related areas.

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Course Title: **Auto Tech III**

**Course number: 01987**

Location: Lakeview High School, South Lake High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: Auto Tech II.

This class is a vocationally-oriented course and begins where the Auto Technology II class ended. It gives an in-depth look at electronic and computerized ignition, air-conditioning fundamentals, clutches, basics of transmission, front end suspension, and engine overhaul. The student will work on all aspects of automotive repair. It is 60% hands-on and 40% classroom discussion. Students will be requested to try state licensing tests in related areas. Students can also use this as an avenue to the cooperative education program where the student works, gets high school credit, and earns money.

Course Title: **Advanced Automotive Technology I**

**Course number: 01987**

Location: Roseville High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: Successful completion of Basic Auto Technology and instructor's approval.

This course is designed to train persons interested in becoming an automotive technician. Experience will be gained by completing performance objectives and performing various service repairs on customer cars. Additional experience through on-the-job training, with pay, can be obtained by enrolling in the Applied Technology Co-op Program.

**Course A:** The first semester covers shop safety and tool usage, automotive brakes and service, tire service and alignment.

**Course B:** The second semester covers basic electronics, ignition systems, batteries, alternators and starters and related service procedures.

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Course Title: **Advanced Automotive Technology II**

**Course number: 01987**

Location: Roseville High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 12

Prerequisites: Successful completion of Advanced Auto Technology I and instructor's approval.

This course is a comprehensive auto service training program designed for the student interested in a career in the automotive service trade. Advanced auto service and repair techniques are taught. Additional experience through on-the-job training, with pay, can be obtained by enrolling in the Applied Technology Co-op Program.

**Course A:** The first semester covers shop safety, and equipment usage, front end alignment, computer scanners and engine tune-up.

**Course B:** The second semester covers clutch and transmission service, auto transmissions theory and service, rear and transaxles, as well as air conditioning service.

Course Title: **Automotive Technology I**

**Course number: 01987**

Location: Fitzgerald High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: None.

**Introduction to Automotive Technology:** A course designed to introduce the field of Automotive Service Technology. Upon completion of this course, students will demonstrate an understanding of automobile service careers, safety, tools, materials, supplies, and minor services. Employability and communication skills will also be included in this introductory course.

**Automotive Brakes:** A course designed to introduce the principle operation and servicing of brake systems. Upon completion of this course, students will demonstrate an understanding and service knowledge of disc brakes, drum brakes, hydraulic systems and electrical components relating to ABS brake systems. Special emphasis will be given to safety procedures, specialty tools and equipment used in this service area.

**Engine Repair:** A course designed to teach the principles and procedures required to completely rebuild an automotive engine. Students will gain practical experience in engine diagnosis, disassembly, inspection techniques, assembly start-up and adjustment procedures. Special emphasis will be placed on safety procedures, specialty tools, fasteners and equipment used during engine repair.

The above courses are in accordance with the ASE NATEF Certification Standards.

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Course Title: **Automotive Technology II**

**Course number: 01987**

Location: Fitzgerald High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: None.

**Suspension and Steering:** A course designed to teach the operating principles and repair of steering and suspension systems, wheel alignment, and balance. Topics for this course include: wheel alignment, suspension systems, steering systems, specialty tools, equipment and supplies used to service steering and suspension systems.

**Manual Transmission and Axles:** A course designed to teach the principles and operation of clutch assemblies, propeller shafts, differentials, drive axles, manual transmissions and transfer cases. Students will gain hands-on skills associated with the basic servicing of these manual drive line components. Students will also use specialty tools, equipment and supplies required in this service area.

The above courses are in accordance with the ASE NATEF Certification Standards.

Course Title: **Automotive Technology III**

**Course number: 01987**

Location: Fitzgerald High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: None.

**Electrical and Electronic Automotive Systems:** A course designed to teach the principles and operation of basic automotive electrical systems. Students will gain practical experience in the diagnosis, repair, and service of electrical circuits. Topics in this course include: electrical test equipment schematics, test procedures, batteries, starters, alternators, ignition systems, lighting, accessory circuits, and electronic test procedures.

**Engine Performance:** A course designed to teach the operating principles and service procedures of engine tune-up, emission controls and basic driveability. Students will gain hands-on skills with specialty tools, equipment and supplies used in servicing these systems.

The above courses are in accordance with the ASE NATEF Certification Standards.

**\*\*\*Students that successfully complete the Automotive Technology program can earn up to six (6) credits through the Macomb Community College Articulation Agreement. Students will have the opportunity to become involved in VICA, Apprenticeship programs, and Co-op programs. See your counselor or Automotive Technology teacher for further details.**

**\*\*\*The Automotive Technology program is directly connected to an apprenticeship training program in partnership with Sears Automotive, Macomb Community College, Automotive Service Association, and the Bureau of Apprenticeship Training (BAT). Upon successful completion of at least one year of Automotive Technology and reaching the age of 16, students are eligible to become a registered apprentice and begin On-The-Job-Training (OJT) while still continuing related training at the high school level.**

**\*\*\*Upon graduation from high school, students will continue their OJT and receive their related training from Macomb Community College. In many cases, the employer will assist in tuition reimbursement for the apprentice. Completion of the 8,000 hours and related training will result in Journeyman certification. In some cases, an associate degree will also be earned.**

Course Title: **Automotive Technology IV**

**Course number: 01987**

Location: Lincoln High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: None.

**Engine Repair:** A course designed to teach the principles and procedures required to completely rebuild an automotive engine. Students will gain practical experience in engine diagnosis, disassembly, inspection techniques, assembly start-up and adjustment procedures. Special emphasis will be placed on safety procedures, specialty tools, fasteners and equipment used during engine repair.

\* Students that complete the course and pass the State of Michigan's licensing exam for this area will be awarded their automotive mechanic's license in Engine Repair.

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Course Title: **Automotive Technology V**

**Course number: 01987**

Location: Lincoln High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: None.

**Suspension and Steering:** A course designed to teach the operating principles and repair of steering and suspension systems, wheel alignment, and balance. Topics for this course include: wheel alignment, suspension systems, steering systems, specialty tools, equipment and supplies used to service steering and suspension systems.

**Automotive Brakes:** A course designed to introduce the principle operation and servicing of brake systems. Upon completion of this course, students will demonstrate an understanding and service knowledge of disc brakes, drum brakes, hydraulic systems and electrical components relating to ABS brake systems. Special emphasis will be given to safety procedures, specialty tools and equipment used in this service area.

\* Students that complete the course and pass the State of Michigan's licensing exam for these areas will be awarded their automotive mechanic's license in Suspension and Steering and/or Automotive Brakes.

Course Title: **Auto Body I, II, III, IV**

Course Number:

Location: Golightly Career & Technical Center

Length of Course: 2 year, 2 ½ hour block

Credits Earned: 30 per year

Grade Level: 11, 12

Prerequisites: None.

Students learn basic procedures in sheet metal finishing, welding operations, replacement of component parts, body and frame alignment and refinishing procedures.

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Course Title: **Automotive Service Technology I, II, III, IV**

Course Number: **01987**

Location: Golightly Career & Technical Center

Length of Course: 2 year, 2 ½ hour block

Credits Earned: 30 per year

Grade Level: 11, 12

Prerequisites: None.

Students rotate between four shops over a two year period.

**Engine Drive Line Diagnosis:** maintain and repair automotive engine and powertrain components.

**Electrical / Diagnostics / Tune-up:** conduct tests and make diagnosis of engines and components in order to perform specific repairs and adjustments.

**Brakes / Steering:** learn the construction, operation, maintenance and servicing of brakes and the front-end system.

**Automotive Service Bay:** practice and refine skills and learn customer service techniques.

---

Course Title: **Transportation & Small Engine Repair Technology**

Location: Centerline High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: None.

This is the course for you if you are thinking about a career in the areas of small engine repair or automotive services. You will receive an overview of working with automobiles, lawn mowers, chain saws, garden tractors, outboard motors, and other industrial equipment. Students will experience typical business service procedures; for example, writing a repair order, speaking with customers, trouble shooting, identifying and ordering parts, and repairing and testing machines. Each student will have an opportunity to compete against students from other schools using his / her technical skills.

Course Title: **Small Engine and Marine Repair I, II, III, IV**

Location: Golightly Career & Technical Center

Length of Course: 2 year, 2 ½ hour block

Credits Earned: 30 per year

Grade Level: 11, 12

Prerequisites: None.

Students learn the different types of air-cooled and marine engines and will have a basic working knowledge of electricity and hydraulics.

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**Course Title: Building Construction Technology I**

**Course number: 01877**

Location: Kramer

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: Student should be physically able to perform duties normally associated with the construction trades.

This course is designed to train and prepare students for jobs related to carpentry, electrical, plumbing and mechanical repairs of public and private buildings. Training will include practical experiences in house construction, remodeling of various types, including repair of floors, ceilings, walls, painting and wallpapering. Students learn to install or replace electrical and plumbing fixtures, such as switches, lights, sinks and faucets. Co-op training may be elected in the senior year. May be taken more than once for credit.

**\*\*\*The Building Construction Technology course offers in partnership with Associated Builders and Contractors, Inc. for 11th and 12th students. Upon successful completion of the training program, and high school graduation, students may continue apprenticeship at second year level - leading to journeyman status or enter a community college and apply apprenticeship credits toward a two-year degree.**

**\*\*\*Students may also enter the Detroit Carpenters Apprenticeship Training program (union) and complete a four year apprenticeship to receive their journeyman status. Students that are 17 years old by June of their junior year, may opt to be employed through the program during the summer between their 11th and 12th grade.**

**\*\*\*Students enrolled in apprenticeship training receive paid work experience while accumulating on-the-job training (OJT) hours necessary to become a journeyman.**

Course Title: **Building Trades I, II**

Course number: **01877**

Location: Kramer

Length of Course: 1 - 2 year(s), 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: Building Construction Technology I. Average physical condition, average mechanical aptitude, average manual dexterity, ability to tolerate dust, and willingness to work outdoors.

This course is designed to allow students who have completed the Building Construction Tech class to put their skills to a real working situation by actually building a complete house. Students should be aware that they will be working out in the cold during the winter and must agree to all safety rules and regulations. Attendance and behavior must be good at all times. Seniors that have not taken the Building tech class will be admitted by approval of the teacher or counselor based on attendance and related tech class.

**\*\*\*The Building Construction Technology course offers in partnership with Associated Builders and Contractors, Inc. for 11th and 12th students. Upon successful completion of the training program, and high school graduation, students may continue apprenticeship at second year level - leading to journeyman status or enter a community college and apply apprenticeship credits toward a two-year degree.**

**\*\*\*Students may also enter the Detroit Carpenters Apprenticeship Training program (union) and complete a four year apprenticeship to receive their journeyman status. Students that are 17 years old by June of their junior year, may opt to be employed through the program during the summer between their 11th and 12th grade.**

**\*\*\*Students enrolled in apprenticeship training receive paid work experience while accumulating on-the-job training (OJT) hours necessary to become a journeyman.**

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Course Title: **Building Maintenance**

Location: Kramer

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: Student should be physically able to perform duties normally associated with this type of occupation.

This class is designed to train and prepare students in caring for and cleaning the buildings and grounds of hospitals, hotels, schools, shopping malls, office buildings, and industrial complexes. Training will include the use of power cleaning equipment, grounds keeping equipment, and cleaning products. Co-op training may be elected in the senior year. It may also be taken more than once for credit.

**Course Title: Building Trades**

**Course number: 01877**

Location: Roseville High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: None.

Vocational building trades classes are designed to give students on the job experience of many trades through the construction of a house. The students learn all aspects of construction from foundation to the finished house. The trades include masonry, carpentry, electrical, plumbing, drywall, and roofing. The student will work in groups with assigned tools, and through this group, they will learn responsibility and how to work with others.

---

**Course Title: Advanced Building Trades**

**Course Number: 01877**

Location: Roseville High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: None.

Building trades classes are designed to give students on the job experiences in many skilled trades through the actual construction of a house. The students should learn all aspects of construction from foundation to the finished house. Trades include masonry, carpentry, electrical, plumbing, drywall, and roofing. Students will work in small groups with assigned tools and through this group they will learn responsibility, cooperation, and how to work with others.

---

**Course Title: Drafting I / CAD**

**Course Number: 01878**

Location: Centerline High School, Lincoln High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: Completion of Drafting I and or Drafting II with a "C" average per semester and drafting teacher's recommendation.

This course is designed to introduce students to AutoCAD software and expand the student's understanding of Orthographic Projection. Skill emphasis is placed upon freehand sketching, use of work lines for projection, single and double auxiliary view development, section views dimensioning techniques, ISO symbols, threads & fasteners, basic detailing and introduction to descriptive geometry. Student competitions include: VICA, SME, and MITES. Students are expected to transfer instrument drawings to CAD format.

---

Course Title: **Drafting II, CAD**

Course Number: 01878

Location: Centerline High School, Lincoln High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: Vocational Drafting I with a “C” average or better. Suggested completion of Algebra II with a “C” average or better.

This course is designed to prepare students for Advanced Placement examinations offered by Macomb Community College. Skill emphasis is placed upon advanced AutoCAD, 3 dimensional solids with Mechanical Desktop, presentation drawings with AutoVISION, advanced descriptive geometry, sheetmetal patterns, cardboard modeling calculation of tolerance and fits. Student competitions include: VICA, ASBE, SME and MITES. Students are expected to transfer instrument drawings to CAD format. Students enrolled in this class are expected to be enrolled in a co-op job.

**\*\*Advanced placement is offered through an articulation agreement between Macomb Community College and Van Dyke Public Schools. AP credit requires students to take examinations for each class in which they choose to receive AP credit. Upon passing AP exams students will have credit applied to their transcript per current Macomb Community College policy.**

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Course Title: **Drafting III, CAD**

Course Number: 01878

Location: Lincoln High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 12

Prerequisites: Drafting II/CAD Vocational with a “C” average or better. Suggested completion of Algebra II with a “C” average or better.

This course is designed to prepare students for Advanced Placement examinations offered by Macomb Community College. Skill emphasis is upon advanced AutoCAD, 3 dimensional solids with Mechanical Desktop, presentation drawings with AutoVISION, advanced descriptive geometry, sheet-metal patterns, cardboard modeling calculation of tolerance and fits. Student competitions include: VICA, ASBE, SME and MITES. Students are expected to transfer instrument drawings to CAD format. Students enrolled in this class are expected to be placed in a co-op job.

**\*\*Advanced placement is offered through an articulation agreement between Macomb Community College and Van Dyke Public Schools. AP credit requires students to take examinations for each class in which they choose to receive AP credit. Upon passing AP exams students will have credit applied to their transcript per current Macomb Community College policy.**

Course Title: **Computer Aided Drafting I, II, III, IV**

Course Number: 01878

Location: Golightly Career & Technical Center

Length of Course: 2 year, 2 hour block

Credits Earned: 30 per year

Grade Level: 11, 12

Prerequisites: None.

Students learn lettering and sketching techniques, create multi-view orthographic drawings, construct auxiliary views, develop sectional views, learn dimensional techniques, perform basic and advanced computer operations, construct 3-D wireframe drawings, render solids-model parts and produce detail and assembly drawings of machine parts. The course includes all required manual drafting skills and computer aided drafting operations.

---

Course Title: **Drafting, CAD I**

Course Number: 01878

Location: Harper Woods High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: One year of Drafting Technology.

This is a "hands on" course for individuals who enjoy creating things in their mind and then relating those ideas to paper. Areas of exploration include: basic and advanced design techniques in autobody, architecture, civil, computer aided, tool fixture and die design. The skills that are acquired here can be used to produce drawings that will eventually become blueprints used in industry.

---

Course Title: **Drafting, CAD II**

Course Number: 01878

Location: Harper Woods High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 12

Prerequisites: One year of Drafting, CAD I with a grade of "B" or higher.

This course is a continuation of Drafting, CAD I. It is primarily for the advanced drafting student that has a true and honest desire to continue in the drafting field. Student will explore many advanced drafting and design projects. Remember, "Nothing in the world can be built...until it is first designed."

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Course Title: **Advanced Drafting Design CAD**

**Course number: 01878**

Location: Harper Woods High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 12

Prerequisites: Minimum of one year of Drafting.

This course is for the advanced drafting and design student. Depending on you schedule, it can be either a one or two hour class. Major concentration will be to prepare you to test out of an 11 credit hour college class at Macomb Community College, in the following areas: Detailing, Intro to Auto CAD, Intro to Body Drafting and Descriptive Geometry.

**Course Title: CTE Drafting & Design I**

Location: Lake Shore High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: None.

This class meets two hours per day, five days per week and is designed for those students wishing to increase their competency in mechanical or architectural drafting and design and who plan on pursuing a career in engineering, design, or drafting.

For students concentrating in mechanical drafting, the course content will include a study of multiple-view drawings, dimensioning and geometric tolerance practices, auxiliary and section views, threads and fasteners, detail and assembly drawings, and introduction to auto body design and descriptive geometry. Each student will also have considerable exposure to the "AutoCAD" computer assisted drafting program.

Students who concentrate their studies in the architectural area also learn the "AutoCAD" CAD program as well as becoming familiar with the principle of single family and multiple-family residential dwellings. Depending on the student's level of experience, each student will design and draw a complete set of plans for either a single-family or multi-family structure. Satisfies the State of Michigan computer requirement.

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**Course Title: CTE Drafting & Design II**

Location: Lake Shore High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 12

Prerequisites: None.

CTE Drafting and Design II is a 2-hour block class that meets five days per week and further advances a students knowledge of the drafting and engineering fields. Each student will have the opportunity to concentrate their studies in either the mechanical or architectural area. For those concentrating in the mechanical area, emphasis will be placed on advanced drafting practices as well as the "AutoCAD" computer aided drafting program, product design and development, and auto body design principles. Students who concentrate their studies in architecture will learn the principles of building design for small commercial structures. Each student will then design and draw a set of plans for such a structure. Architectural students will also have the opportunity to work with the "AutoCAD AEC" computer aided drafting program. Satisfies the State of Michigan computer requirement.

Course Title: **T & I Electronics**  
Location: Lakeview High School  
Length of Course: 1 year, 2 hour block  
Credits Earned: 20  
Grade Level: 11, 12  
Prerequisites: None.

The class is vocational oriented and will cover entry level skills required for careers in computer repair, electrical apprentice, electronic technician / engineering and home appliance repair. Approximately 55% of classroom time will be spent in the laboratory wiring circuits and using “state of the art” electronic measurement tools. Some instructional units taught are electrical history, resume, job search, soldering, electron theory, scientific notation, DC & AC circuits, trouble shooting, PC board layout and construction, OHM’s Law, Kirchoff’s law, Thevenin’s theorem, meter and oscilloscope use, and basic residential NEC code / wiring. Projects are used to reinforce the learning concepts and theory. Textbooks, laboratory workbooks and computer software materials are from the Heathkit Educational Series.

Second year students cover AC & semiconductor circuits, laboratory instructional projects including a power supply, sound continuity tester, AM / FM radio, sonic robot, touch control switch, surface mount, soldering, digit volt meter, and telephone kit.

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Course Title: **Electronics I, II**  
Location: Warren Woods Tower High School  
Length of Course: 1 – 2 year(s), 2 hour block  
Credits Earned: 20 each year  
Grade Level: 11, 12  
Prerequisites: It is recommended that students have a minimum of one semester of Intro to Electronics. It is also recommended that the students have regular Algebra and Science.

This program is designed to prepare students interested in obtaining at least an Associate Degree in Electronics after graduation from high school. Students will be provided the right mix between theoretical concepts and “hands-on” experience. They will study power supplies, communication devices, amplifiers, digital electronics, microprocessors, and machine language programming.

Seniors with one year of Electronics can gain experience by enrolling in co-op.

**\*\*\*Students who complete Electronics I, II with at least a 2.00 GPA and meet admission requirements at National Institute of Technology (NIT) will receive the following credit toward their NIT degree:**

**DC / AC Electronics (EC101A) – 12 credits**  
**DC / AC Laboratory (EC104A) – 6 credits**

Course Title: **Electronics I, II, III, IV**

Course number:

Location: Golightly Career & Technical Center

Length of Course: 2 year, 2 ½ hour block

Credits Earned: 30 per year

Grade Level: 11, 12

Prerequisites: None.

Students gain basic understanding of electronic circuits and diagnose / repair AC and DC components. Students study the basic concepts embodied in AC / DC, solid state and digital electronics. An understanding of clinical monitoring equipment servicing and trouble shooting is another major focus.

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Course Title: **T & I Graphic Arts I**

Location: South Lake High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: None.

In this course, student activities include lectures, demonstrations, and laboratory experiences. Experiences in the laboratory enrich the student in better understanding of graphic arts techniques. After a portion of a full unit is discussed, the student engages in laboratory work. In this way, the student not only learns the concepts, but is physically involved in a job shop atmosphere.

In addition, students gain competence in the introduction of Computerized Desktop publishing. First and second year students will experience introductory and advanced techniques in composition, camera operations, stripping, plate making, presswork, silk screen operations, advance desktop publishing and bindery, and 35 mm B&W Photography. Students may participate in the Industrial Co-op Program in their senior year. Satisfies the State of Michigan computer requirement.

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Course Title: **Visual Imaging I**

Location: Centerline High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: None.

Suggested co-requirement: Typing and math.

Students will learn the six (6) basic printing processes which include relief, gravure, stencil, planography, photo chemical, and electrostatic printing. Safe operations of all tools and equipment in the graphics industry will be taught. Students will learn to operate the following equipment: offset presses, horizontal camera, paper folder, paper cutter, and 35 mm camera. Students will create business cards, slide shows, a line negative calendar, and a four page brochure. Desktop publishing technology will also be taught.

Course Title: **Visual Imaging II**

Location: Centerline High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 12

Prerequisites: Passes Visual Imaging I with a "C" average or better.

Suggested co-requirement: Typing and math.

Students will learn the advanced operation of the horizontal camera, offset press, and electronic publishing software. Safe operation of all tools and equipment in the graphics industry will be emphasized. Students will make: two-color business cards, an electronic slide show, halftone negatives, electronic forms generation, and four-color offset printing. Advanced photography techniques will be taught.

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Course Title: **Law Enforcement I, II, III, IV**

Location: Golightly Career & Technical Center

Length of Course: 2 year, 2 ½ hour block

Credits Earned: 30 per year

Grade Level: 11, 12

Prerequisites: None.

Students learn public and private enforcement and services related to protection of life and property which include fire fighting, first aid / CPR and police and security skills.

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Course Title: **Manufacturing Careers & Technology Education**

Course Number:

Location: Lake Shore High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: None.

The purpose of this course is to provide students with transferable skill and knowledge which would apply to industrial manufacturing. The student will follow a basic training program of study leading to careers in: Die Making, Machine Building, Multiple Spindle Machining, Lathe Operating, Quality Control, Computer Numerical Control Operations, Tool Making, Mold Making, Inspection, Mill Machining, General Machining and Robotics Applications. The competencies taught during the mini apprenticeship program are: Measuring, Lathes, Milling, Grinders, Bench Work, Statistical Process Control Computer Numerical Programming, Shop Math, Blue Print Reading, CAD/CAM (computerized drafting/manufacturing), CNC Mill and Robotics Operations, CNC Lathe (98-99 years start). This course is for the technically minded student who likes hands-on experience to pursue any careers in the manufacturing field. It is expected that a student who completes this mini apprenticeship program will go on to enter an employment situation soon after graduation. During the course a student may be eligible to be placed in a cooperative employment position. This course satisfies State of Michigan first level Machinist, as well as computer requirements.

Course Title: **Manufacturing Technology I**

Course Number:

Location: Centerline High School, Lincoln High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: Student need a good attitude towards work and god attendance.

Student will receive training in all aspects of metal machine operations and welding. Specific skills will be developed on the milling machine, lathe, drill press, surface and O.D. grinders, shaper, hand tools, and precision machining, followed by hands on training on the CNC lathe and milling machine.

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Course Title: **Manufacturing Technology II**

Course Number:

Location: Centerline High School, Lincoln High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: Completion of Manufacturing Technology I, a good attitude towards work and good attendance.

This course is an extension of Manufacturing Technology I. The basic skills of the first course will be refined and more complex projects and problems will be covered. Co-op students may elect to enroll for one hour as a co-op related class.

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Course Title: **Advanced Manufacturing Technology**

Course Number:

Location: East Detroit High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: None.

If interested in this course, contact the Work Study Department at Grosse Pointe North High School for additional information.

Course Title: **Machine Trades**

Location: Roseville High School

Length of Course: 1 year, 2 hour block

Credits Earned: 20

Grade Level: 11, 12

Prerequisites: None.

This course prepares students to do precision cutting and shaping of metal with machine tools. Course activities include laboratory experience using digital lathes, digital mills, precision grinders, and precision measuring instruments (micrometers, dial indicators, gauge blocks, and vernier gauges). Emphasis is placed on accuracy and planning machine operations. Students will be required to close tolerance while learning more complex setups and machine operations on standard tool room machinery.

Second year and advanced level students will experience manufacturing processes, which include computer-aided drafting and computer-aided manufacturing (CAD/CAM), computer numerical control, and basic robotics.

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Course Title: **Welding and Cutting I, II, III, IV**

Location: Golightly Career & Technical Center

Length of Course: 2 years, 2 ½ hour block

Credits Earned: 30 per year

Grade Level: 11, 12

Prerequisites: None.

Students learn procedures of four major hand-held welding and cutting processes: oxyacetylene welding and brazing, shielded metal arc welding and gas tungsten arc welding. Students also learn design, layout, cut and test welds.

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Course Title: **Machine Shop I, II, III, IV**

Location: Golightly Career & Technical Center

Length of Course: 2 years, 2 ½ hour block

Credits Earned: 30 per year

Grade Level: 11, 12

Prerequisites: None.

Students produce parts and tools with the aid of blue prints, sketches and existing parts using drill presses, computerized lathe and milling machines; perform bench / layout operations and inspections.

Course Title: **Mass Media Communications I, II, III, IV**

Course Number:

Location: Golightly Career & Technical Center

Length of Course: 2 years, 2 ½ hour block

Credits Earned: 30 per year

Grade Level: 11, 12

Prerequisites: None.

The Mass Media course is a two year program that offers student hands on experience in television and radio production. Instructional areas include: camera operation, lighting techniques, editing, directing and radio engineering.