LYNN VOCATIONAL TECHNICAL INSTITUTE

“Students Today…Professionals Tomorrow”

Program of Studies
2018 - 2019

Lynn Vocational Technical Institute
80 Neptune Boulevard
Lynn, Massachusetts 01902
781-477-7420 Main Building
781-477-7204 Annex Building
CONTENTS

CONTENTS ............................................................................................................................... 2
DIRECTOR’S MESSAGE ............................................................................................................... 3
LYNN PUBLIC SCHOOLS ADMINISTRATIVE OFFICES .......................................................... 4
PHILOSOPHY AND MISSION STATEMENT ............................................................................... 5
SPECIAL EDUCATION PROGRAMS ....................................................................................... 6
PARENT INFORMATION CENTER ........................................................................................... 7
ENGLISH LANGUAGE LEARNER PROGRAM ....................................................................... 8
ADMISSION POLICY ............................................................................................................... 9
LYNN VOCATIONAL TECHNICAL INSTITUTE ..................................................................... 9
   I. INTRODUCTION ............................................................................................................. 9
GRADING SYSTEMS ........................................................................................................... 18
CLASS RANKINGS ............................................................................................................... 19
GRADUATION REQUIREMENTS ........................................................................................... 21
SUMMER SCHOOL POLICY AND PROCEDURES ................................................................ 22
STATE COLLEGE ADMISSIONS REQUIREMENTS ................................................................. 24
SAFETY AND HEALTH ....................................................................................................... 25
EXTRA CURRICULAR ACTIVITIES ....................................................................................... 26
SCHOOL TO CAREER PROGRAM (CO-OPERATIVE EDUCATION) Error! Bookmark not defined.
EXPLORATORY PROGRAM (GRADE 9) .................................................................................. 28
STUDENT PORTFOLIO .......................................................................................................... 29
ACADEMIC PROGRAMS ....................................................................................................... 29
SUMMARY OF COURSE OFFERINGS ............................................................................... 30
ENGLISH LANGUAGE ARTS PROGRAM ............................................................................. 32
MATHEMATICS PROGRAM ............................................................................................... 35
SCIENCE PROGRAM .......................................................................................................... 38
SOCIAL STUDIES PROGRAM .............................................................................................. 42
ENGLISH LEARNER PROGRAM .......................................................................................... 44
WORLD LANGUAGE PROGRAM .......................................................................................... 47
ELECTIVES ........................................................................................................................... 48
TECHNICAL PROGRAMS ...................................................................................................... 48
APPLICATION FOR ADMISSIONS ....................................................................................... 70
DIRECTOR’S MESSAGE

Dear Parents and Students,

Welcome to Lynn Vocational Technical Institute. I am committed to the goal that L.V.T.I. will continue to evolve as an educational institution where students are focused on academic and vocational technical achievement and have the necessary support to be successful in the skills required of graduates as they face the challenges of the 21st century. It is the goal of all faculty and staff at L.V.T.I. to truly make a difference in the lives of our students and the community that we serve.

It is very important that we strive to strengthen the lines of communication between parents and all members of our school. Parent involvement is a must to ensure student success; our children will have a greater chance to succeed if we work together as partners. Parents, please take time to visit the school and learn about Lynn Tech. Plan to attend the school on Open House nights and other school events. Volunteer to be on the School Council and share your input.

Please refer to the LPS/LVTI website for teacher contacts, activities and important dates on a regular basis. Also, please contact our guidance office to sign up for our Home Access Center which will allow you to check on your child’s academic progress, assignments, grades and attendance.

Finally, please do not hesitate to call or email myself or staff members if you have questions or concerns regarding your child’s education and progress. Together, we will assure that students will receive the best education possible and are well prepared to achieve their goals upon graduation.

Sincerely,

Robert Buontempo Jr
Principal/Director, LVTI
Superintendent of Schools....................................................... Catherine C. Latham, EdD
Deputy Superintendent............................................................ Kimberlee Powers
Deputy Superintendent............................................................ Patrick Tutwiler, PhD
Executive Director of Curriculum & Instruction ....................... Debra Ruggiero

School Committee
Mayor Thomas M. McGee, Chairman
Thomas Iarrobino, Secretary to the School Committee
  Brian Castellanos
  Donna M. Coppola
  John E. Ford, Jr.
  Lorraine M. Gately
  Jared C. Nicholson
  Michael Satterwhite

Regularly scheduled School Committee meetings are held on the 2nd and 4th Thursday of each month during the school year in to School Committee room located at the Administration Building, 100 Bennett Street.

Non-Discrimination Policy
It is the policy of the Lynn Public Schools not to discriminate on the basis of race, color, national origin, age, sex, religion, sexual orientation, gender identity, disability, or home status in admission to, access to, treatment in, or employment in its programs and activities in compliance with Title VI and VII of Civil Rights Act of 1964, Title IX of the 1972 Education Amendments to the Civil Rights Act, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination in Employment Act, the Americans with Disabilities Act, and M.G. L., Ch. 76, Sec. 5, M. G. L., Ch. 151B, and M.G.L., Ch. 151C.
PHILOSOPHY AND MISSION STATEMENT

Philosophy

Lynn Vocational Technical Institute provides its student population with a career and technical education as well as a rigorous academic program. By creating a safe environment that is conducive to learning, students are able to develop into successful professionals and life-long learners. The school gives students the opportunity to participate in cooperative education, community service, and numerous extracurricular activities.

Lynn Vocational Technical Institute takes pride in supporting a diverse student body. The highly qualified staff is committed to helping its students excel in their academic and technical pursuits and in developing leadership skills that will prepare them for the future.

Mission

The mission of Lynn Vocational Technical Institute is to provide students with the academic and technical skills necessary to be college and career ready. We are committed to fostering and promoting a strong work ethic that will enable students to become productive, respectful and responsible adults.

“Students Today...Professionals Tomorrow”

Accreditation

Lynn Vocational Technical Institute is accredited by the New England Association of Schools and Colleges, Inc., a non-governmental, nationally recognized organization whose affiliated institutions include elementary schools through collegiate institutions offering postgraduate instruction.

Accreditation of an institution by the New England Association indicates that it meets or exceeds criteria for the assessment of institutional quality. An accredited school or college is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.
Respect for Diversity

Diversity is encouraged and nurtured in the uniqueness and richness of the academic and technical programs at Lynn Vocational Technical Institute. The diverse talents and interests of our students are developed in fifteen discrete occupational programs. In pursuit of this institutional goal, Lynn Vocational Technical Institute is committed to fostering respect and assuring support for all students without regard to race, ethnicity, color, gender, sexual orientation, gender identity, religion, national origin, disability or home status.

SPECIAL EDUCATION PROGRAMS
Lynn Catarius, PhD, Acting Administrator of Special Education

Special Education Programs in Lynn are designed to service children between the ages of 3 and 21 who have been identified as having special needs.

Students may be referred for a special education evaluation by parents, school personnel, the courts, human service agencies, and physicians.

The Special Education services that are provided in an individual or small-group setting and inclusionary settings in the schools are as follows:

- Early Childhood Programs
- Academics; via learning centers, resource rooms, and alternative elementary and secondary school settings
- School Adjustment Counselors
- Vision and Mobility Services
- Services for Hearing Impaired Students
- Adaptive Physical Education
- Specialized Nursing Services
- Occupational Therapy
- Speech & Language Therapy
- Physical Therapy
- School Psychologists
- Support Services – out of school; hospital programs; home tutoring
- Contractual Services – May Center, N.S. Consortium, Carroll Center, Project Bootstrap, Raw Arts
- The Chapter 766 Parent Advisory Council meets monthly for supportive and educational programs.

Specialized Programs include:
- The C.O.A.C.H. Program – Creating Opportunities for Autistic CHildren
- The T.E.A.M.S. Program – Together Educating and Advancing Multi-disabled Students
- The Fallon Elementary School – servicing students in grades pre-k – 6 with acute emotional disabilities
- The Fecteau Leary Middle/Senior High School – program (grades 6-12) for students with acute emotional disabilities
Information on Chapter 766 and Federal Law PI-94-142 are available by contacting:

Lynn Public Schools -- Special Education Department
100 Bennett St., Lynn, MA 01905
Administrator of Special Education
781-268-3000 ext. 188

Assistant Director of Curriculum and Instruction-Health-PE
Responsible for Section 504/ADA, Title II, and Title IX
Michael Geary
100 Bennett Street
Lynn, MA  01905
781-593-1680 ext. 3148

PARENT INFORMATION CENTER
Dave Hegan, Student Assignment Manager

The Lynn Public Schools Parent Information Center, located at 100 Bennett Street, offers parents information about their school system. We believe that an informed parent is likely to become an involved parent who will help us improve our schools.

Parents are welcome to visit or telephone the Parent Information Center at 781-592-8796, extension 3179, for information regarding the voluntary desegregation plan, the student assignment policy, within system school choice, the McKinney-Vento Homeless Assistance Program, Language Support Program, Special Education Program and transportation options.

Each year, pre-registration for grades K to grade 12 begins on the first week of March; appointments for pre-registration may be made beginning on the 1st business day of February. In order to process registrations, parents must provide the child’s immunization records, birth certificate, proof of guardianship, picture Id of the parent/guardian and recent proof of address such as a utility bill which clearly states the parent/guardian’s home address in Lynn.
ENGLISH LEARNER PROGRAM
Rania Caldwell, Director – Language Support

The role of the Language Support Office is to determine the appropriate level of academic support for each English Language Learner (EL) in the Lynn Public Schools. WIDA (World Class Instructional Design and Assessment) assessments are used to identify a student’s English language proficiency level and determine which supports and class settings are most appropriate for individual student success. According to WIDA guidelines, English Learners progress through six levels of language proficiency: Entering, Emerging, Developing, Expanding, Bridging, and Reaching.

1. The following class settings are offered in the Lynn Public Schools for identified English Learners:

   1. **Sheltered English Instruction (SEI) Classes** - EL students receive grade-level content by SEI-endorsed core-academic teachers using SEI knowledge and strategies to support access to the academic content and promote the development of academic English.
      a. **ESL Classes**: EL students in SEI classes will also receive direct ESL instruction from an ESL teacher to advance English language proficiency. This includes social and academic language in listening, speaking, reading, and writing.

The Language Support Office also monitors students who are designated as Formerly English Learner (FEL) for four years.
I. INTRODUCTION

An admission process is necessary in technical vocational schools where space is a limiting factor. Vocational technical laboratories (shops) are designed and equipped to serve a specific maximum number of students safely. Consequently, a complex of such laboratories lacks both the space and flexibility to accommodate the possible needs and/or interests of all applicants. Therefore, students are admitted to Lynn Vocational Technical Institute (LVTI) in accordance with this admission policy. The School Committee of the City of Lynn approved this policy on April 27, 2010.

II. EQUAL EDUCATIONAL OPPORTUNITY

Lynn Vocational Technical Institute admits students and makes available to them its advantages, privileges, and courses of study without regard to race, color, sex, religion, national origin, sexual orientation, disability, gender identity, or homelessness status.

English Learner (EL) students may seek assistance from Lynn Vocational Technical Institute in completing the necessary forms and interpreting during the entire application and admission process upon request of the applicant.

Students with disabilities may voluntarily self-identify for the purpose of requesting reasonable accommodations during the entire application and admission process.

Information on English proficiency and disability submitted voluntarily by the applicant, for the purpose of receiving assistance and accommodations during the entire application and admission process, will not affect the applicant’s admission to the school.

III. ELIGIBILITY

Any eighth, ninth, or tenth grade student who is a resident of the city of Lynn who expects to be promoted to the grade they seek to enter, is eligible to apply for fall admission or admission during the school year subject to the availability of openings to Lynn Vocational Technical Institute. Priority for admission is given to residents of the city of Lynn. Residency in Lynn must be verified by the Parent Information Center.

Students who are not residents of the city of Lynn are eligible to apply for fall admission or admission during the school year subject to the availability of openings to Lynn Vocational Technical Institute (LVTI) provided they expect to be promoted to the grade they seek to enter by their local district. Nonresident students will be evaluated using the criteria contained in this Admission Policy.
School Choice
The School Committee for the city of Lynn has voted not to participate in the School Choice Program.

Transfer students from other Chapter 74 state – approved vocational technical programs are eligible to apply for fall admission or admission during the school year to grades 9, 10, 11, & 12 at Lynn Vocational Technical Institute provided they expect to be promoted to the grade they seek to enter by their current school. Transfer students will be evaluated using the criteria contained in this Admission Policy.

McKinney-Vento
Students who are homeless will be accepted to Lynn Vocational Technical Institute according to the selection criteria contained in this admission policy.

Home Schooled
Students who are formally being home schooled may apply for admission to Lynn Vocational Technical Institute, including admission during the school year, provided all Admissions Policy criteria are followed. The home school student’s parent(s)/guardian(s) must submit a copy of the Home School approval letter from the local school superintendent. Home schooled students will be accepted to Lynn Vocational Technical Institute according to the selection criteria contained in this admission policy. Please refer to Section VI: Application Process for additional information regarding selection criteria.

IV. ORGANIZATIONAL STRUCTURE
Lynn Vocational Technical Institute is comprised of students who reside in the city of Lynn. Residency is certified by the Lynn Public Schools Parent Information Center. There are three public middle schools, one alternative school, one charter school and three parochial schools that comprise the sending schools in the city of Lynn. Openings for grades 9-10 will be determined by Lynn Vocational Technical Institute’s administration. Lynn Vocational Technical Institute is accredited by the New England Association of Schools and Colleges and is in compliance with state and federal laws and regulations ensuring applicants’ equal access to public educational institutions.

It is the responsibility of the Director to supervise the administration of the policies and procedures required to admit and enroll applicants into LVTI in conformity with this Admission Policy.

- Lynn Vocational Technical Institute has an Admissions Team appointed by the Director. The Team consists of the Director of LVTI, Assistant Director of LVTI, and Guidance Counselors.

Responsibilities of the Admissions Team include:

A. determination of standards for admission
B. development and implementation of admission procedures
C. processing of applications
D. ranking of students
E. acceptance of students according to the procedure and criteria in the admission policy
F. establishment and maintenance of a waiting list of acceptable candidates

Parent Information Center, the LVTI main office and guidance counselors are responsible for disseminating information about Lynn Vocational Technical Institute (LVTI). See Section V: Recruitment Process.
V. RECRUITMENT PROCESS

Lynn Vocational Technical Institute disseminates information about the school through a variety of methods.

a. A Career Expo is scheduled during the fall. Eighth grade students are bused in or walk from their middle schools with their classes in order to attend the Career Expo. On a weekend day or evening, members of the public, as well as prospective students and their parent(s)/guardian(s) are welcome to attend the Career Expo.

b. Open Houses during the fall, winter and spring are scheduled. Prospective students and their parent(s)/guardian(s) have an opportunity to visit all vocational-technical programs and speak with the teachers as well as members of the administration and guidance staff.

c. Parent(s)/guardian(s) may schedule individual visits at a mutually convenient time.

d. Brochures, which describe vocational technical programs including academic courses, clubs, sports, and cooperative education, are distributed during 8th grade visits and the Open House.

VI. APPLICATION PROCESS

Application process for Fall Admission* to the ninth, tenth and eleventh grade.

1. Students interested in applying to Lynn Vocational Technical Institute for fall admission to the ninth, tenth, and eleventh grade must:

   a. obtain an application from the school guidance counselor.
   b. return the completed application to the guidance counselor by the deadline set by the guidance counselor.

2. It is the responsibility of the guidance counselor to:

   a. complete the designated portion of the application form.
   b. forward the completed applications to the guidance office at Lynn Vocational Technical Institute by the deadline. Complete applications include:

   Grade 9 (Fall Admission):

   (1) application form with all responses and required signatures
   (2) final averages from grade 7 and to-date for grade 8 in English, math, social studies, and science from the local school report card
   (3) total of unexcused absences from grade 7 and to date for grade 8 from the local school report card
   (4) discipline report from grade 7 and to date for grade 8 record from the local school report card, or assessment of behavior signed by the local school administrator
   (5) the local school guidance counselor’s recommendation

   Grades 10 & 11 (Fall Admission) (Grade 12 transfers from another Chapter 74 approved Vocational Program):

   (1) application form with all responses and signatures
   (2) final averages from the previous school year averages to date for the current year in English, math, social studies and science from the local school report card
   (3) total of unexcused absences from the previous school year and to-date for the current school year from the local report card
   (4) discipline report from the previous school year and to date for the current year from the local school record or assessment of behavior signed by the local school administrator
   (5) the local school guidance counselor’s recommendation
3. If incomplete applications are received, the following procedures will be followed:
   a. the guidance office at Lynn Vocational Technical Institute will notify the guidance counselor responsible for submitting the application that the application is incomplete and will request completion
   b. the applicant’s parent(s)/guardian(s) will be notified by the Lynn Vocational Technical Institute guidance office in the event that the problem is not resolved by the guidance counselor.
   c. if after notifying the guidance counselor and the parent(s)/guardian(s), the application remains incomplete for ten school days, the application will be voided.

Application process for admission to grades 9, 10, and 11 during the current school year (grade 12 students transferring from another Chapter 74 approved Vocational Program)

1. Students interested in applying to LVTI for admission during the current school year must:
   a) obtain an application from the local school guidance counselor
   b) return the completed application, signed by the applicant and parent/guardian, to their local school guidance counselor and request that the required report cards of grades, attendance and discipline records be compiled and forwarded to LVTI
   c) schedule an interview with LVTI admission representative. The admission representative will go to the local school to interview the applicant

2. It is the responsibility of the local school guidance counselor to:
   a) complete their portion of the application form
   b) forward the completed application to the guidance office at LVTI. Complete applications for admission during the current school year must include:

   **Grade 9**

   1. application form with all responses and required signatures
   2. final grades in English, math, social studies and science from grades 7 and 8 from the local school report card
   3. total number of unexcused absences and discipline reports from grades 7 and 8 from the local school report
   4. current school year (grade 9) from the local school report card; grades to date in English, math, social studies and science; number of days unexcused absence; discipline report
   5. local school guidance counselor’s recommendation

   **Grades 10 and 11 (grade 12 transfer from another Chapter 74 approved Vocational Program)**

   1. application form with all responses and required signatures
   2. final grades for years completed in English, math, social studies, and science
   3. grades to-date current school year in English, math, social studies, and science from the local school report
   4. total of unexcused absences from the previous school year and to date for the current school year from the local school report
   5. discipline report from the previous school year and to-date of application for the current school year from the local school report
3. If incomplete applications are received, the following procedures will be followed:

   a. the guidance office at Lynn Vocational Technical Institute will notify the guidance counselor responsible for submitting the application that the application is incomplete and will request completion.
   b. the applicant’s parent(s)/guardian(s) will be notified by the Lynn Vocational Technical Institute guidance office in the event that the problem is not resolved by the guidance counselor.
   c. if after notifying the guidance counselor and the parent(s)/guardian(s), the application remains incomplete for ten school days, the application will be voided.

LATE APPLICATIONS

Applications received after the deadline may not be accepted. If accepted, it will be evaluated using the same criteria as other applications and the composite score will be computed. It will be placed in rank order on a waiting list with other late applications.

TRANSFER STUDENTS

Applications from students who are enrolled in a state-approved (Chapter 74) vocational technical high school program in another school (transfer students) will be considered for admission (including admission during the school year) if they relocate away from their current school and wish to pursue the same program of study at Lynn Vocational Technical Institute.

All transfer applicants must attend an informational meeting at LVTI. If the applicant or parent/guardian cannot provide transportation, an official from LVTI will go to the local school to meet with the applicant. Such applications will be evaluated according to the provisions of this Admission Policy.

WITHDRAWN STUDENTS

Students who withdraw from LVTI and who are attending or not attending another high school may reapply to LVTI following the procedures contained in this Admission Policy and will be evaluated using the criteria contained in this Admission Policy.

VII. SELECTION CRITERIA

The Admissions Team at Lynn Vocational Technical Institute will use weighted admissions criteria to process completed applications. Each applicant will be assigned a score derived from the sum of the sub scores of the following criteria:

A. Scholastic Achievement: Maximum 32 points

<table>
<thead>
<tr>
<th>Grade Average</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A = 90 - 100</td>
<td>8</td>
</tr>
<tr>
<td>B = 80 - 89</td>
<td>6</td>
</tr>
<tr>
<td>C = 70 - 79</td>
<td>4</td>
</tr>
<tr>
<td>D = 60 - 69</td>
<td>2</td>
</tr>
<tr>
<td>F = 59 - 0</td>
<td>1</td>
</tr>
</tbody>
</table>
For applications to grade 9 (fall admission), the average of grade 7 and quarters 1 and 2 of grade 8 marks in English, social studies, math and science from the report card are used. For applications to grade 10 (fall admission) the average of the previous school year and quarters 1 and 2 of the current school year marks in English, social studies, math and science from the report card will be used. For applications to grades 9 & 10 (admission during the school year), the grades in English, social studies, math and science from the report card of the current school year to the date of the application will be used.

B. Attendance: Maximum 25 points

<table>
<thead>
<tr>
<th>Number of unexcused absences</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>25</td>
</tr>
<tr>
<td>6-10</td>
<td>20</td>
</tr>
<tr>
<td>11-15</td>
<td>15</td>
</tr>
<tr>
<td>16-20</td>
<td>10</td>
</tr>
<tr>
<td>21-30</td>
<td>5</td>
</tr>
<tr>
<td>31+</td>
<td>0</td>
</tr>
</tbody>
</table>

For applications to grade 9 (fall admission), the sum of grade 7 and terms 1 & 2 grade 8 unexcused absences from the local school report card are used. For applications to grades 10 (fall admission), the sum of the previous school year and terms 1 & 2 current school year unexcused absences from the school report card are used. For applications to grades 9 & 10 (admission during the school year) unexcused absences from the previous school year, and the current school year to the date of application from the school report card are used.

C. School Discipline and Conduct: Maximum 28 points

<table>
<thead>
<tr>
<th>Discipline Rating</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 suspensions</td>
<td>28</td>
</tr>
<tr>
<td>1 suspension</td>
<td>23</td>
</tr>
<tr>
<td>2 suspensions</td>
<td>15</td>
</tr>
<tr>
<td>3-5 suspensions</td>
<td>10</td>
</tr>
<tr>
<td>6 or more suspensions</td>
<td>5</td>
</tr>
</tbody>
</table>

For applications to grade 9 (fall admission), the average of grade 7 and terms 1 & 2 of grade 8 discipline records are used. For applications to grades 10 (fall admission), the average of the previous school year and terms 1 & 2 of the current school year assessments from the school discipline records are used. For applications to grades 9 & 10 (admission during the school year) unexcused absences from the previous school year, and the current school year to the date of application from the school report card are used.

D. Guidance Counselor’s Recommendation: Maximum 5 points

<table>
<thead>
<tr>
<th>Rating</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding</td>
<td>5</td>
</tr>
<tr>
<td>Above Average</td>
<td>4</td>
</tr>
<tr>
<td>Average</td>
<td>3</td>
</tr>
<tr>
<td>Fair</td>
<td>2</td>
</tr>
<tr>
<td>Poor</td>
<td>0-1</td>
</tr>
</tbody>
</table>
E. Interview: Maximum 10 points

Each applicant will have an interview with a member of the Admissions Team. The interview will consist of five standard questions, with each question earning a score between 0 and 2, for a maximum of 10 possible points. Each answer will be scored on a rubric in order to determine the points earned.

<table>
<thead>
<tr>
<th>Rating</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding</td>
<td>9-10</td>
</tr>
<tr>
<td>Above Average</td>
<td>7-8</td>
</tr>
<tr>
<td>Average</td>
<td>5-6</td>
</tr>
<tr>
<td>Fair</td>
<td>3-4</td>
</tr>
<tr>
<td>Poor</td>
<td>0-2</td>
</tr>
</tbody>
</table>

After points are given in each area, the points are totaled for each applicant. A maximum total of one hundred (100) points can be earned.

SELECTION PROCESS

The Admissions Team at Lynn Vocational Technical Institute will review, discuss and make recommendations for action on all applications. The Admissions Team is comprised of the following positions.

- Director of LVTI
- Assistant Director of LVTI
- Guidance Counselors

The Admissions Team considers grades, attendance, discipline, recommendation and the interview.

After a point total for each applicant has been determined, all resident applicants are placed in order of their "point total". Lynn resident applicants are then accepted in the order of the point total they have achieved. The resident applicant with the highest point total is accepted first, the applicant with the second highest point total is accepted second, and so on until all seats are filled. All Lynn resident applicants are accepted, declined, or placed on a waiting list. If openings occur, the seats are filled by accepting Lynn applicants from the waiting list. These applicants, like those accepted earlier, are accepted in order of their place on the waiting list determined by the total points given according to the selection criteria. The wait list is valid for the current school year.

Non-resident applicants are evaluated using the criteria in this Admission Policy and will be placed on the wait list after Lynn resident applicants. Non-resident applicants on the waiting list will only be accepted if all Lynn resident applicants on the waiting list have been accepted. Applications received after the spring deadline will be evaluated using the same criteria as other applications, and their composite score will be integrated in rank order on the established waiting list. Applicants should contact the LVTI main office at (781) 477-7420, for the specific application deadline date for the current school year.

All applicants whose applications are received by Lynn Vocational Technical Institute by the spring deadline are notified of their status by a letter to their parents/guardians and their guidance counselor by the first week in April. Applicants whose applications are not received by LVTI by the deadline will receive a letter informing them of their status.
IX. ENROLLMENT

In order to enroll at Lynn Vocational Technical Institute for the fall, applicants must have been promoted to the grade they seek to enter by their sending school. In addition, they must have passed courses in English language arts or its equivalent and math for the school year immediately preceding their enrollment at Lynn Vocational Technical Institute.

X. VOCATIONAL TECHNICAL PROGRAM PLACEMENT

All ninth graders who enroll at LVTI participate in a vocational technical exploratory program from September through April designed to help them learn about their talents and interests relative to a variety of different vocational technical programs. In addition, vocational technical program (shop) teachers evaluate students during the exploratory program. Students explore each vocational technical shop for ten days. At the end of this exploratory period, each student selects his/her program of choice, as well as a second and third choice.

Each shop teacher evaluates students during the 10 days a student is exploring the shop. During exploratory, students are evaluated and scored on the following five criteria: Punctuality 5%, Effort 5%, Follows Instructions 5%, Safety 5%, and Projects 5%. A student may earn a maximum of 25 points during each vocational technical program explored (13), for a maximum of 325 points earned during the Shop Exploratory Program.

Students are admitted into the shop of their choice based on a ranking derived from the point total received based on the following four criteria: (Maximum possible points equals 100)

1. Shop Teacher Evaluations (40%) derived from the point total received in all shops combined during the exploratory period.

2. Academic Grades (40%) consisting of English (10%), math (10%), science (10%) and social studies (10%): academic rubric from “Section VII: Selection Criteria

3. Attendance (10%): attendance rubric from “Section VII: Selection Criteria

4. Discipline (10%): discipline rubric from “Section VII: Selection Criteria

Students are admitted to the shop of their choice based on the point total of all four criteria. The maximum possible points a student may earn is 100 points. For example, a student with a point total of 92 would be admitted before a student with a point total of 90.

If a shop fills, based on point total, before a student gets his or her first choice, the guidance counselor then moves to the student’s second or third choice depending upon whether there is an opening in the shop. If a student’s point total is so low that he or she was not placed in his or her second or third choice shop because the shops were filled by students with higher point totals, the guidance counselor will meet with the student and present a list of the shops with openings and ask the student to choose one of them. This process continues until all students are placed.

Students who enroll at LVTI after grade nine may shadow vocational technical programs that have openings, before making a program selection. Students are evaluated by each shop teacher during the period of shadowing. If the number of enrollees seeking a particular shop exceeds the number of openings, a ranked waiting list will be maintained by the guidance counselor. After placement, students continue to work in the shop in which they were placed for the remainder of the school year and the school years to follow.
If a student wishes to transfer, he or she may apply to transfer to another shop. Transfer requests will be considered subject to the availability of openings in the requested shops per the ranked waiting lists maintained by the guidance counselor. Each transfer applicant will be counseled individually to determine the appropriateness of the transfer for the particular student.

XI. REVIEW AND APPEALS

The applicant’s parent(s)/guardian(s), upon receipt of a letter from LVTI indicating that the applicant was not accepted or was placed on a waiting list, may request a review of the decision by sending a letter requesting a review to the Director of LVTI within thirty days of the receipt of the rejection/wait list letter. The Director will respond in writing within thirty days. If after the review, the parent(s)/guardian(s) wish to appeal the findings of the review this may be done by sending a letter to the Superintendent of Schools. The Superintendent will respond in writing to the letter with his/her decision of the appeal within thirty days of the receipt of the letter.

The applicant’s parent(s)/guardian(s), upon receipt of a letter from LVTI indicating that the applicant was not accepted or placed on a waiting list for a particular vocational program, may request a review of the decision by sending a letter requesting a review to the Director within thirty days of the receipt of the rejection/wait list letter. The Director will respond in writing to the letter with the findings of the review within thirty days.
GRADING SYSTEMS

It is the philosophy of the Lynn School Committee that students respond more positively to the opportunity for success than to the threat of failure. It seeks, therefore, through its instructional programs, to make achievement both recognizable and possible for students. It emphasizes achievement in its processes of evaluating student performance. It reports achievement through the use of letter grades.

The primary purpose of grading is to report to students and their parents the extent to which their son or daughter has mastered the content of a course as defined by the course descriptions.

GRADING SYMBOLS

The following letter grades shall be used:

- **A** = Student mastery of course content is Excellent/ Superior
- **B** = Student mastery of course content is Very good/Above Average
- **C** = Student mastery of course content is Good/ Satisfactory
- **D** = Student mastery of course content is Minimally Satisfactory
- **F** = Student mastery of course content is Unsatisfactory, No credit is granted. Student is eligible to attend Summer School with principal’s approval.
- **I** = Student’s work is incomplete for valid reason (i.e., illness). The next report card will indicate a letter grade in place of “I”, if work is completed satisfactorily.
- **P** = Student mastery of course content is satisfactory.
- **W** = Student has withdrawn from course.

*BASIS FOR GRADING*

Course expectations will be discussed and/or distributed at the beginning of each course to all students. Teachers will take time to explain to students the course objectives, his/her expectations of student performance and responsibilities, and the evaluating system the teacher will use to determine the extent to which the student has achieved the course objectives. The teacher will also make clear to the students at appropriate intervals (e.g., beginning of each quarter), and parents as necessary, the basis upon which the grades are earned.

Grades are based on evidence of the attainment of the instructional objectives of the course. The extent to which the student has attained these objectives shall be determined by his/her performance on assessment measures developed, administered, and corrected and returned by the teacher. Included for grade determination will be tests, quizzes, homework assignments and class participation activities.

All final failing grades (F’s) shall be reviewed by the teacher. The teacher shall have the authority to adjust these final grades upward by no more than one level (F to D-). The minimum passing grade shall be D-.

No passing grade may be changed to a failing grade. Teachers are strongly encouraged to use the comment section of the report card in order to provide additional evaluative information to parents and students.

Student grades for all grades and courses shall be reported using the following conversion table:

<table>
<thead>
<tr>
<th>Grade</th>
<th>A</th>
<th>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
<th>C</th>
<th>C-</th>
<th>D+</th>
<th>D</th>
<th>D-</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>93-</td>
<td>90-</td>
<td>87-</td>
<td>83-</td>
<td>80-</td>
<td>77-</td>
<td>73-</td>
<td>70-</td>
<td>67-</td>
<td>63-</td>
<td>60-</td>
<td>Below</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>92</td>
<td>89</td>
<td>86</td>
<td>82</td>
<td>79</td>
<td>76</td>
<td>72</td>
<td>69</td>
<td>66</td>
<td>62</td>
<td>60</td>
</tr>
</tbody>
</table>
CLASS RANKINGS

The Lynn School Committee acknowledges that the primary purposes of ranking students within their class are:

- To identify, recognize, and commend superior academic achievement within a class of students.
- To assist the various financial aid and scholarship award’s committees in determining which student should receive financial assistance to continue education.
- To encourage students to take courses that challenges them to their highest potentials.
- To assist post-secondary educational institutions in making admission decisions.

A student’s rank in class shall be determined solely by his/her achievement in grades nine through twelve in the following disciplines:

- Technical Program
- English Language Arts
- History/Social Studies
- Mathematics
- Science
- Foreign Language
- Instructional Technology

Computation of each student’s rank in class shall be cumulative and in accordance with the enclosed regulations. This policy is in effect beginning September 1997.

**BENEFITS OF PROPOSED POLICY**

- Students “overly concerned with class rank” may take non-academic electives since their performance in these subjects will not affect their class rank.
- Computation is more simple, direct, and easier to understand by students, parents, and faculty.

In order that the policy concerning Class Rank is carried out in accordance with the mandate of the School Committee, the following regulations are effective as of September 1997:

Class rank shall be computed at the end of each quarter for each student in grades nine, ten, eleven, and twelve, and be cumulative through the senior year, inclusive.

**I. GRADE POINT AVERAGE** – Class Rank will be determined on the basis of each student’s grade point average. In determining class rank, the following information will be used to compute each student’s Grade Point Average:

- Course level (Honors)
- Course subject (e.g., English, Biology)
- Number of credits per subject taken
- Quarterly grade achieved (numerical)
- Course level factor

The Grade Point Average is a numerical value of the student’s total grades averaged after adjusting for course level difficulties, course length, and actual achievement in each course. The greater the course level difficulty and the higher the grade earned results in a higher grade point average.
II. COURSE LEVEL FACTOR – In order to encourage students to enroll in courses that challenge them and require them to work to their full potential and to recognize and report real difference in achievement and course difficulty, the following system of course factoring shall be used:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>FACTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP</td>
<td>4.0 + 1.0 = 5.0</td>
</tr>
<tr>
<td>Honors</td>
<td>4.0 + 0.5 = 4.5</td>
</tr>
<tr>
<td>College, etc.</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Each grade earned will be multiplied by the appropriate course factor depending upon the difficulty level of the course taken.

COMPUTATION OF GRADE POINT AVERAGE

Step 1: A quarterly numerical grade for each student shall be computed for each course taken within the approved academic disciplines. Failing grades shall be included.

Step 2: Each grade shall be multiplied by its appropriate course level factor.

Step 3: The sum of the weighted grades shall be divided by the total number of course credits earned to determine the grade point average.

DETERMINATION OF CLASS RANK – All grade point averages (GPAs) within a class (e.g., seniors) shall be ranked from high to low and assigned a rank beginning with one (1) for the highest GPA and descending down the numerical scale until all GPAs have received a rank.

The senior student who has earned the class rank of one (1) shall be named Valedictorian. The student who has earned the class rank of two (2) shall be Salutatorian.

When ties occur, computation of the grade point averages will be extended to the third decimal place. If ties cannot be broken in this manner, then students with equivalent GPAs (to the third decimal place) will have earned the same rank and their names shall be listed alphabetically. The number of the next rank will be the next number in the count of students. For example, if three students tie for fifth place, all will be ranked as fifth. The next person will be ranked eighth.

For inclusion in class rank; a student must have spent a minimum of four high school semesters within the Lynn Public Schools.

For students who did not fulfill the four-semester requirement, and who need to be ranked for college admission and/or scholarship purposes, class rank will be reported from their prior school and/or an approximate percentile ranking in our senior class will be reported.

Special Education and English Learners (EL) students under a ruling by the U.S. Department of Education, Office for Civil Rights (OCR) cannot be excluded from inclusion in Class Rank, although the same weighted grading system utilized for regular education students must be employed. The only exception allowed by the OCR is for SPED students enrolled in substantially separate needs classes. The OCR rationale for this is class rank, which applies only to regular education academic and non-academic courses, not for substantially separate courses at the secondary level.
GRADUATION REQUIREMENTS

Graduation from the Lynn Public Schools signifies that a student has satisfactorily completed the prescribed courses as established by the Lynn School Committee in accordance with the laws of the Commonwealth of Massachusetts. In order to graduate from Lynn English High School, Lynn Classical High School or Lynn Vocational Technical Institute, a student must earn a **minimum of one hundred (100) credits and pass the English, mathematics, and science components of the MCAS exam.**

In order for senior students to participate in graduation ceremonies they must have the following:

- A minimum of **100 credits for graduation.**
- Received a competency determination in English, math, and science.
- Successfully completed all academic requirements for graduation by the last school day for seniors.
- All credits shall be earned by satisfactorily **passing** required and elective courses offered by any department.
- All students are required to pass a **minimum of 25 credits** in each of their four (4) years of high school.
- All students will be scheduled for a **minimum of 30 credit hours** each year.

**Credits:**
A total of **25 credits** per year are needed for promotion to the next grade; 100 credits are needed in order to graduate.

**SUGGESTED PROGRAMS**

In addition to academic courses, students should include electives to help them become more independent and to pursue creative interests (see electives).

**STUDENTS ARE ENCOURAGED TO ATTAIN THE MAXIMUM NUMBER OF ACADEMIC CREDITS AVAILABLE AND ARE EXPECTED TO ATTAIN MORE THAN THE MINIMUM NUMBER OF CREDITS REQUIRED.**

**Promotion and Graduation Information**

**Seniors**

In order to participate in graduation ceremonies, senior students must have:

1. Successfully completed all academic and vocational requirements for graduation by the last school day for seniors.
2. All students must meet all mandated MCAS requirements.
SUMMER SCHOOL POLICY AND PROCEDURES

Introduction to Summer School
Summer School provides middle school and high school students the opportunity to recover courses failed over the course of the school year or to take courses for original credit to regain tracking for on-time graduation. Due to the web-based nature of digital curriculum, students work on the assignments outside of school in addition to required scheduled time in school in order to complete course-work.

Overview
In blended classrooms, students interact with digital curriculum and receive individualized support from a teacher. Because students engage in a self-directed program, teachers may differentiate instruction for each student by utilizing data to identify areas of weakness, and develop instructional interventions including small-group and individual direct instruction. This teacher-support leads to improved learning outcomes. Each summer school course will have content-specific teachers on-site to supplement the digital curriculum, and these teachers will also be certified in APEX.

Enrollment Information:

Submit Application
Students may begin registering for summer school on June 1st. A registration application will be made available at the office of each high school as well as on the Lynn Public Schools website. Lynn Tech and Fecteau-Leary students may register for either the Lynn Classical or Lynn English program.
Refer to the application form for program specifics, dates, and times.

Program Fees
Payment for summer school is cash or money order made out to Lynn Public Schools.
- $125/one course and $25 for each additional course (LPS students).
- $200/one course and $25 for each additional course (non LPS students).
- LPS students with extreme financial hardship may petition to the Offices of the Deputy Superintendents for assistance.

Scheduling
Days and Hours of Operation: Monday through Thursday, 8:00 AM to 12:00PM. Please refer to the application form for the starting date.
Schedules will be provided to all students on day one. All courses are expected to be completed within the summer school time frame.

Expected Attendance
Students must attend one hour each day for each assigned subject (English, Math, Science, History) until they finish the course.
Middle School

All middle school summer school classes will take place at Lynn Classical High School. Middle school students will register at Lynn Classical during open enrollment which begins on June 1st and ends the day before summer school begins.

Course Completion and Grades

Students will be issued a final grade upon completion of the course. This course will be posted on the student’s transcript. The grade does not count towards the student’s cumulative average. Non-LPS students will receive a letter of successful course completion to present to their own schools.

Adopted by the Lynn School Committee on June 9, 2016 – Revised Policy
STATE COLLEGE ADMISSIONS REQUIREMENTS

The Massachusetts Board of Higher Education requires the following college-preparatory academic units as a minimum:

- **English** – 4 courses
- **Mathematics** – 3 courses (Algebra I & II and Geometry or Trigonometry or comparable coursework)
- **Science** – 3 courses (drawn from Natural Science and/or Physical Science and/or Technology/Engineering; including 2 courses with laboratory work); *Technology/engineering courses must be designated as science courses (taken for science credit) by the high school*
- **Social Studies** – 2 courses (including 1 year U.S. History)
- **2 years Foreign Language** – 2 courses (in a single language) *(or voc-tech chapter 766 substitution)*
- **Electives** – 2 courses (from the above subjects or from the Arts & Humanities or Computer Sciences)

Vocational-Technical Student Applicants

- Vocational-technical students must complete 16 college preparatory courses, distributed in the same manner and with the same minimum grade point averages required of other high school graduates, with the following exceptions:
  - Two vocational-technical courses may be used to fulfill the two required electives.
  - Vocational-technical high school graduates who do not complete the two required college preparatory foreign language courses must complete an additional elective college preparatory course, for a total of three such courses, and satisfy one of the following options:
    1. Complete at least one Carnegie unit of foreign language;
    2. Complete a fourth Carnegie unit of mathematics or science, which need not be a laboratory course; or
    3. Complete one Carnegie unit of computer science.

  - *Note: A Carnegie unit represents a full academic year of study or its equivalent in a specific subject.*
  - This requirement will remain in effect until the Department of Education (DOE) implements its requirements regarding foreign language study for vocational-technical students. At that time, vocational-technical applicants for admission to UMass and the state universities will be required to meet DOE requirements for foreign language study.
SAFETY AND HEALTH

The personal safety and health of everyone in this school are of greatest importance. The prevention of work injuries and illness will be given first consideration, prior to the operation of any tool, equipment or machinery. Individual shops conduct safety orientations; require safety and clothing items that will be pertinent to their trade, and establish a set of safety rules students are to follow. Every 9th grade student is given a pair of safety glasses at no cost, which they must wear in appropriate shop. Students are responsible for these glasses; lost or damaged safety glasses may be replaced at the cost of $5.00 in the Assistant Director’s office.

According to the General Laws of Commonwealth of Massachusetts Safety Glasses; Ch. 71, S. 55C. Eye Protection Devices,

“Each teacher and pupil of any school, public or private, shall, while attending classes in industrial art or vocational shops or laboratories in which caustic or explosive chemicals, hot liquids or solids, hot molten metal, or explosives are used or in which welding of any type, repair of servicing of vehicles, heat treatment or tempering of metals, or the milling, sawing, stamping or cutting of solid materials, or any similar dangerous process is taught, exposure to which may be a source of danger to the eyes, wear an industrial quality eye protective device, approved by the department of public safety. Each visitor to any such classroom or laboratory shall be required to wear such protective device.”

Protective equipment, including personal protective equipment for face, eyes, head and extremities, protective clothing, respiratory devices and protective shields and barriers will be provided and shall be used and maintained in a sanitary and reliable condition.

Safety equipment including fire extinguishers and first-aid materials are located throughout the building for use in an emergency only. USE OF SAFETY EQUIPMENT IN A NON-EMERGENCY SITUATION IS STRICTLY PROHIBITED, and subject to possible suspension.
EXTRA CURRICULAR ACTIVITIES

Students are encouraged to become involved in extracurricular and co-curricular activities. Participation in a club or organization enables them to develop interests and talents beyond the academic and technical setting.

The following are clubs and organizations which are available. The list of offerings is subject to budgetary considerations and interest.

**Athletics**

Lynn Vocational Technical Institute offers a wide range of interscholastic athletic programs throughout the school year. All students are strongly encouraged to participate in at least one athletic/extracurricular activity each year. All athletes must meet academic eligibility requirements.

The Lynn Vocational Technical Institute athletic program offers students many advantages:
- there are no user fees required for any sport, thus ensuring that cost does not exclude any student.
- student athletes receive recognition in both local and regional press
- potential to go on to play at post secondary institutions

L.V.T.I. athletes are involved in the following interscholastic sports programs:

**Fall** - Cheerleading, Cross country, Football, Soccer (boys and girls), and Volleyball,
**Winter** - Basketball (boys and girls), Cheerleading, Co-ed Indoor Track, Co-ed Swimming, Hockey and Wrestling
**Spring** - Baseball, Lacrosse, Softball, and Co-ed Track and Field

A physical examination is required before participating in any of the aforementioned sports programs. Eligibility is in accordance with M.I.A.A. and Lynn Public School policy.

**Class Officers**

Elections for class officers for all grades are held annually. Students seeking elected offices must demonstrate good school citizenship, good attendance and be passing all their academic courses, and technical courses. Students wishing to run for office will be asked to have a recommendation form signed by their academic, shop, and technical teachers and by fellow students.

**Clubs**

Extra curricula activities are offered based on student interest and budgeting restraints. Student clubs meet on a regular basis after school. Participation in school clubs gives students a chance to have a voice in school life, be active in a service group, enjoy an interesting group activity, and increase their experience and enjoyment at L.V.T.I. Following is a list of available clubs and activities: Swim club, FIRST Robotics, Gay straight alliance, Language club, Intramural sports, National Honor Society, School newspaper, Speech, Yearbook, SKILLS USA/VICA, Drama (PAWS), TV club, Weight lifting club, Chess club, Man2Man Mentor, Mock Trial, Student Council, Peer Mentors, Web Master Club, Anime Club, Board Gaming Club, Book Club, Brain Games, Culinary, Dance, Digital Art Design, Graphics, Guitar, Zumba.
National Honor Society

Membership in this organization is based on scholarship, service, leadership, and character. Each fall faculty members are asked to approve a list of 11th and 12th grade students who have been nominated for membership into the National Honor Society. Students have to be in good standing regarding attendance, maintain a grade point average of 3.5 or better, and have no F’s on their report cards in order to be eligible for membership in the National Honor Society. The Society organizes activities of interest to its members and is an active service organization.

SkillsUSA

The SkillsUSA is a national organization of vocational/technical students, which sponsors activities and competitions. This organization allows outstanding students to demonstrate knowledge and skills in their fields. SkillsUSA prides itself on developing well-rounded vocational students and quality employees by building self-confidence, positive work attitudes, and good communication skills. To participate in a SkillsUSA conference/competition, a student must be in good standing in all academic/vocational subjects and comply with the school attendance/tardiness policy.

Student Government

STUDENT ADVISORY COUNCIL – Two Lynn Tech Seniors (along with their counterparts from Lynn Classical and English High Schools) serve on a Student Advisory Board.

Its purpose is:

* To attend a meeting with the Superintendent or his/her designee to discuss the issues/agenda coming before the school committee.
* To represent - before the administration and School Committee - the attitudes, interests, and concerns of the student body.
* To initiate projects and proposals from the student body for presentation to the School Committee.

These students meet twice a month, and at various times throughout the school year. Their presence may be required at School Committee meetings held during the evening.

REGIONAL STUDENT ADVISORY COUNCIL - Two students meet with the student council and travel monthly to the regional meeting on a school day. The student body elects representatives each spring for the ensuing year. Because these students will miss a school day each month, it is essential that they meet all criteria for participation in this council.

SCHOOL COUNCIL- The Education Reform Act of 1993 established that each school will have a School Council. Each council must have the following categories of members: principal, teachers, parents, “other persons” who are not parents or teachers, students at the school, and at least one student for any school that contains any of grades 9-12. The purpose of the school council is to advise the principal/director in matters such as class size, safety, and discipline, extracurricular activities, school improvement plans, budgets, and the like.
COOPERATIVE EDUCATION

Cooperative Education involves integrating classroom technical training with practical application theory by providing on-the-job experience. Students are provided the opportunity to develop academic, technical, and employability skills not acquirable in the school-based setting, but acquirable in a work-based setting.

Students in good academic standing who have demonstrated the knowledge and skills associated with two full years of technical training in their major and who have met established high standards of achievement, attendance, work readiness and interest are eligible to participate in this program.

Students must have the approval of their technical instructor(s) and the Co-operative Education placement director. Throughout a co-operative arrangement between the school and employers, students alternate study in school with paid employment in their chosen technical field. Students are evaluated weekly by their employer and documentation is submitted to the cooperative education coordinator.

Cooperative Education requires a formal agreement among the school, employer, student and parent/guardian. Employers agree to meet all requirements of state and federal labor laws and D.E.S.E. Chapter 74 regulations including, but not limited to, those addressing worker compensation insurance, equal employment opportunity, occupational safety and health, and state and federal labor laws as they pertain to minors.

The Cooperative Education Coordinator provides each placement supervisor with the appropriate educational standards to be met and visits the workplace on regular basis.

EXPLORATORY PROGRAM (GRADE 9)

The exploratory program is designed to allow students to make informed decisions in selecting a technical area which they wish to pursue in grades 10 – 12. The exploratory program provides students with experiences in career awareness by giving them an orientation to all seventeen technical areas as well as Career Guidance, Computer Literacy and Safety. During the exploratory program students participate in not only the practical, hands-on experiences, but they also study the history of and career opportunities found in each occupation. This experience promotes equal opportunity and equal access for every student to all of the programs and encourages participation in non-traditional career choices. LVTI believes that the value of exploration and decision making is in itself a learning experience for all in-coming students.

Career plans will be developed for all freshman students and will be evaluated annually. The goal of this plan is to ensure that students choose the career paths that match their interests, abilities, and educational goals. Various assessments are used and short and long term goals are established.

Placement into the technical area is then based upon the exploratory experience, as well as assessment in career ability, aptitude, and interest surveys. At the conclusion of the exploratory program, students will select an area in which to specialize.
STUDENT PORTFOLIO

All ninth grade students will begin to develop a student portfolio using a web-based program called Naviance. This student portfolio will begin with a Career Plan. Students will begin to compile evidence of skills developed in the six strands of the Massachusetts Vocational Technical Curriculum (VTEC) Frameworks:

1. safety
2. technical skills
3. embedded academics
4. employability skills
5. management and entrepreneurship
6. principles of technology

These entries will reflect skill development over the four years of education at Lynn Vocational Technical Institute. It consists of results from Personality Test, Career Interest Profiler, a sample job application, resume, copies of certifications, and shop competencies.

ACADEMIC PROGRAMS

Lynn Vocational Technical Institute believes that well-rounded individuals who are ready to become responsible and contributing members of society must be prepared in academic, as well as technical areas. To this end, the courses offered at LVTI have been designed to assist every student to meet this goal.

The academic program consists of a core curriculum for all grades in all subjects. All academic courses are aligned with the Massachusetts Curriculum Frameworks and are designed for success on standardized exams including the Massachusetts Comprehensive Assessment System (MCAS) and Scholastic Aptitude Test (SAT).
# SUMMARY OF COURSE OFFERINGS

## ENGLISH

<table>
<thead>
<tr>
<th>GRADE 9</th>
<th>GRADE 10</th>
<th>GRADE 11</th>
<th>GRADE 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>English</td>
<td>English</td>
<td>English</td>
</tr>
<tr>
<td>Honors English</td>
<td>Honors English</td>
<td>Honors English</td>
<td>Honors English</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AP Language and Composition</td>
<td>AP Literature and Composition</td>
</tr>
</tbody>
</table>

## MATH

<table>
<thead>
<tr>
<th>GRADE 9</th>
<th>GRADE 10</th>
<th>GRADE 11</th>
<th>GRADE 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algebra I</td>
<td>Geometry</td>
<td>Algebra II</td>
<td>Algebra III and Trigonometry</td>
</tr>
<tr>
<td>Honors Algebra I</td>
<td>Honors Geometry</td>
<td>Honors Algebra II</td>
<td>Honors Pre-Calculus</td>
</tr>
<tr>
<td>Geometry</td>
<td>Algebra II</td>
<td>Honors Pre-Calculus</td>
<td>AP Calculus</td>
</tr>
<tr>
<td>Honors Geometry</td>
<td>Honors Algebra II</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## SCIENCE

<table>
<thead>
<tr>
<th>GRADE 9</th>
<th>GRADE 10</th>
<th>GRADE 11</th>
<th>GRADE 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology I w/lab</td>
<td>Biology II w/lab</td>
<td>Chemistry I w/lab</td>
<td>Physics w/lab</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ecology</td>
<td>Hon. Physics w/lab</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hon. Anatomy and Physiology</td>
<td>AP Physics B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Biotechnology Practices 1</td>
<td>Marine Biology w/lab</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Biotechnology Practices 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>AP Biology II</td>
</tr>
</tbody>
</table>

## SOCIAL STUDIES

<table>
<thead>
<tr>
<th>GRADE 9</th>
<th>GRADE 10</th>
<th>GRADE 11</th>
<th>GRADE 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>World History II</td>
<td>U.S. History I</td>
<td>U.S. History II</td>
<td>Sociology</td>
</tr>
<tr>
<td>Hon. World History II</td>
<td>Hon. U.S. History I</td>
<td>Hon. Us History II</td>
<td>History 20th Century</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## WORLD LANGUAGE

<table>
<thead>
<tr>
<th>GRADE 9</th>
<th>GRADE 10</th>
<th>GRADE 11</th>
<th>GRADE 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Spanish I</td>
<td>• Spanish II</td>
<td>• Spanish II</td>
<td>• Spanish IV</td>
</tr>
<tr>
<td>• Spanish III</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## CO-CURRICULAR COURSES

<table>
<thead>
<tr>
<th>GRADE 9</th>
<th>GRADE 10</th>
<th>GRADE 11</th>
<th>GRADE 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Computer Literacy</td>
<td>• Physical Ed</td>
<td>• Financial Literacy</td>
<td>• Financial Literacy</td>
</tr>
<tr>
<td>• Physical Ed</td>
<td>• CVTE Strands 4+5 Employability &amp; Entrepreneurship</td>
<td>• CVTE Strands 4+5 Employability &amp; Entrepreneurship</td>
<td>• CVTE Strands 4+5 Employability &amp; Entrepreneurship</td>
</tr>
<tr>
<td>• Health</td>
<td>• CVTE Strands 1 Safety</td>
<td>• CVTE Strands 1 Safety</td>
<td>• CVTE Strands 1 Safety</td>
</tr>
<tr>
<td>• Career Guidance</td>
<td>• Physical Education</td>
<td>• Physical Education</td>
<td>• Physical Education</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ACADEMIC COURSE OFFERINGS

ENGLISH LANGUAGE ARTS PROGRAM

The goal of the English Language Arts program is to provide instruction for all learners on how to reason and use language purposefully as they comprehend and convey meaning in the successful pursuit of a high school diploma. The curriculum provides students with experiences that will allow them to develop, practice, and polish their reading, writing, and thinking skills. Objectives of the various courses are developed to meet MCAS requirements and the curriculum is aligned with the Massachusetts ELA Curriculum Frameworks.

Students will be provided with instruction and experiences that will enable them to apply and demonstrate the acquisition of skills in the following areas:

- selecting vocabulary from various sources and demonstrating understanding through written and oral presentations
- composing written assignments using standard English grammar conventions
- analyzing literature including fiction, non-fiction, technical essays and poetry
- evaluating literature based on themes
- writing for a variety of audiences and purposes
- comparing and contrasting elements, conventions and techniques of various media as a resource for various tasks

<table>
<thead>
<tr>
<th>LY100</th>
<th>HONORS ENGLISH 9</th>
<th>5.0 CREDITS</th>
<th>GRADE 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ninth grade honors level is designed to meet the comprehensive needs of college bound students who have maintained the highest level of academic achievement during the middle school years. Students will be required to read widely and to think intelligently and critically. The successful student loves to read, does not consider reading to be a chore, and has a high level of reading comprehension. S/he is willing to present ideas orally and in writing. Papers of up to one thousand words in length may be assigned. Reading, writing, speaking and listening form the core of this curriculum. The student should expect to have demands placed on his/her time, talent, and ability.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prerequisite: A average in subject area from middle school, and proficiency demonstrated on a language skills diagnostic test and teacher recommendation.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LY101*/LY068</th>
<th>ENGLISH 9</th>
<th>5.0 CREDITS</th>
<th>GRADE 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>This course focuses on the development of essential English Language Arts skills. Parts of speech, sentence structure, and word usage and vocabulary development are emphasized as a means of better communication. Paragraph and essay development in response to literature and open response prompts are emphasized. The literacy elements of theme, plot, setting, and characterization are covered through short story and novel study. Analysis of a variety of genres emphasizes the development of students’ reading, response, and analysis skills.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| *LY068 - In this course, modifications to the above curriculum are made as dictated by students’ Individual Education Plans.
LY110 HONORS ENGLISH 10  5.0 CREDITS  GRADE 10

Tenth grade honors level students will be required to read a variety of genres and to write long and often. Library and literary research projects, class discussion, oral presentation, and student-centered learning activity form the core of this curriculum. While grammar and vocabulary are included, emphasis will be on reading and writing. Students should expect to finish an independent reading assignment about every six weeks, in addition to doing regular course work.

Prerequisite: B+ or better average in subject area from previous year and teacher recommendation.

LY111/*LY069 ENGLISH 10  5.0 CREDITS  GRADE 10

This course emphasizes the development of reading, writing, speaking and listening skills to build students’ proficiency in the ELA standards. Grammar and vocabulary are reinforced through reading and writing. The elements of literature, strategies for responses and making connections between current information and past exposure are covered through the use of classic and contemporary literature. The types of literature include novels, short stories, poetry, drama, and non-fiction. Essay development in response to literature and open response prompts is emphasized.

*LY069 - In this course, modifications to the above curriculum are made as dictated by students’ Individual Education Plans.

LY119 HONORS ENGLISH 11  5.0 CREDITS  GRADE 11

This course is designed for students with demonstrated ability to perform and achieve at high levels. Emphasis is placed on the study of American literature with particular attention given to major philosophical concepts and literary techniques. Library and literacy research are required.

Prerequisite: B+ or better average in English 10 and teacher recommendation

LY121/*LY070 ENGLISH 11  5.0 CREDITS  GRADE 11

This course emphasizes clear and concise written expression. Students study the mechanics of writing with the goal of composing and organizing a five paragraph essay. Literature studies examine theme, characterization and plot development with emphasis on American literature. Learning research skills will be an important part of the writing program and student-centered learning activities will encourage continuing development of each student’s academic maturity.

*LY070 - In this course, modifications to the above curriculum are made as dictated by students’ Individual Education Plans.
**LY130  HONORS ENGLISH 12  5.0 CREDITS  GRADE 12**

Designed for students who have demonstrated a love of reading, superior language skills and mature work habits, this course focuses on advanced reading and writing skills through a survey of English literature. Writing emphasis is on longer and more sophisticated expository writing projects, from the college essay to the research paper. Short critical papers, project-based learning, and independent reading assignments are required, as are both individual and group presentations.

Prerequisite:  B+ or better average in subject area from previous year and teacher recommendation

**LY132/*LY071  ENGLISH 12  5.0 CREDITS  GRADE 12**

English 12 provides students with the opportunity to demonstrate their understanding of the language and communication skills already developed in previous classes. Writing skills will continue to be developed through various types of writing ranging from responses to literature to persuasive and descriptive essays. Students will study short stories, poetry, drama, non-fiction, epics, legends, myths and novels.

*LY072 - In this course, modifications to the above curriculum are made as dictated by students' Individual Education Plans.

**LY 136  AP ENGLISH LANGUAGE & COMPOSITION  5.0 CREDITS  GRADE 11**

AP English Language and Composition develops students' abilities as independent readers and writers by giving them a college-level course during their junior year. Students who successfully complete the examination in May, may well qualify for up to one year's credit in English at the college level. The purpose of the course is to increase comprehension of complex tests in American literature through an in-depth study of the structure and manipulation of language. Students will also practice writing effective expository, analytical, and argumentative pieces in a mature style. This intellectually challenging course includes extensive reading and writing. Students in this college-level course should expect demands to be made on their time. Students who sign up for AP Language and Composition are required to take the AP exam.

**LY137  AP ENGLISH LITERATURE & COMPOSITION  5.0 CREDITS  GRADE 12**

AP English Literature and Composition Class develop students' abilities as independent readers and writers by giving them a college-level course during their senior year. Students, who successfully complete the examination in May, may qualify for up to one year's credit in English at the college level. The purpose of the course is to improve students' literacy analysis skills through an in-depth study of world literature, with an emphasis on British literature. Advanced Placement English is both demanding and intellectually stimulating. It requires a student's best effort consistently and puts emphasis upon developing independence of thought and mature habits of critical thinking. Classroom discussion and active participation are vital. Written assignments, both short and long-term, will be an important and frequent feature of the course. Students who sign up for AP English are required to take the AP exam.
MATHEMATICS PROGRAM

The goal of the mathematics program is to provide a rigorous and relevant course of study to meet the needs of all students enrolled at Lynn Vocational Technical Institute. The curriculum is aligned with the Massachusetts Mathematics Curriculum Framework. The framework envisions all students achieving competence through a strong math program that emphasizes problem solving, communication, reasoning and proof, making connections, and using representations.

Throughout the four year program, students will receive instruction and demonstrate a level of competency in the following areas:

1. number sense and operations
2. patterns, relations, and Algebra
3. geometry
4. measurement
5. data analysis, statistics, and probability

These five strands will be incorporated into all grade level course work.

LY300   HONORS ALGEBRA I   5.0 CREDITS   GRADE 9

This is a first year algebra course designed specifically for academically talented 9th grade students. Topics include rational and irrational numbers and operations; linear, quadratic, exponential, trigonometric and rational functions; solving equations and inequalities; matrices, graphing and right triangle geometry; statistics, probability and data analysis. Problem solving and writing in mathematics are stressed. A variety of assessment strategies are employed in preparation for the state MCAS test.

Prerequisite: B-/C+ (with teacher’s approval) or better in 8th grade mathematics.

LY301/*LY080   ALGEBRA I   5.0 CREDITS   GRADE 9

In this course students will develop proficiency in mathematical skills, expand understanding of mathematical concept and improve logic thinking. Topics include: rational and irrational numbers; operations; linear and quadratic equations, defining and graphing real numbers on a number line, basic probability and measures of central tendency, algebraic patterns, and using formulas. Instruction will focus on solving word problems within each of the topic area. Emphasis will be placed on developing algebraic concepts through practical applications. Learning activities will include authentic situations that will allow students to see the relevancy of algebra in a world that continues to rely on modeling patterns and relationships algebraically. Preparation for MCAS and other standardized testing will be stressed.

*LY080 - In this course, modifications to the above curriculum are made as dictated by students’ Individual Education Plans.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Grade Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>LY311</td>
<td>HONORS ALGEBRA II</td>
<td>5.0</td>
<td>10-11</td>
</tr>
</tbody>
</table>

This course is for academically talented students who completed Algebra I and Geometry. Algebra II and trigonometry topics are covered in depth as well as statistics, probability, and data analysis. Emphasis is on functional notation and graphing. Problems are solved verbally, algebraically, numerically, and graphically. A graphing calculator is required.

Prerequisite: B-/C+(with teacher’s approval) or better average in subject area from previous year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Grade Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>LY312/*LY082</td>
<td>ALGEBRA II</td>
<td>5.0</td>
<td>10-11</td>
</tr>
</tbody>
</table>

This course is designed to review and reinforce skills acquired in Algebra I and Geometry. Students will utilize these foundation skills to use the language of algebra, apply the properties of real numbers, solve equations and inequalities, graph relations and functions, analyze linear equations and inequalities, solve systems of linear equations, interpret and analyze statistics, compute probabilities and apply operations and polynomials. Instruction will focus on solving word problems within each of the topic areas and connecting algebra to real work applications. A graphing calculator will be used in this course.

*LY082 - In this course, modifications to the above curriculum are made as dictated by students’ Individual Education Plans.

Prerequisite: Geometry /Algebra I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Grade Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>LY321</td>
<td>HONORS GEOMETRY</td>
<td>5.0</td>
<td>9-10</td>
</tr>
</tbody>
</table>

This course is for the academically talented students who completed Algebra I in grade 8. Focus of the course is geometry and spatial sense, geometry from an algebraic perspective, and measurement. Students will analyze characteristics of two and three dimensional objects; use different representational systems, including coordinate geometry and graph theory; use transformations and symmetry in analyzing mathematical situations; use visualization and spatial reasoning to solve problems both within and outside of mathematics. Students will study attributes, units and systems of measurement and apply a variety of techniques, tools, and formulas for determining measurement. Essential tools used include a ruler, protractor, compass and scientific or graphing calculator.

*LY322/*LY081 GEOMETRY 5.0 CREDITS GRADES 9-10

In this course students will develop skills in the application of geometric concepts to solve problems involving planar and solid figures. Students will learn how to integrate algebraic and geometric concepts as they master the following topics: properties of plane and solid figures; deductive methods of reasoning and the use of logic; rules of congruence, similarity, parallelism and perpendicularity; rules of angle measurement in triangles; and coordinate and transformational geometry. Instruction will focus on solving word problems within each of the topic areas. Connecting geometry to real world applications and preparation for the MCAS and other standardized testing will be stressed.

*LY081 - In this course, modifications to the above curriculum are made as dictated by students’ Individual Education Plans.

Prerequisite: Algebra I
**LY331  HONORS PRE-CALCULUS  5.0 CREDITS  GRADES 11-12**

This course is designed to give students a thorough preparation in the topics needed for the study of calculus. Topics include advanced algebra, geometry, trigonometry, analytic geometry, elementary functions including linear, polynomial, rational, exponential, logarithmic, trigonometric, inverse trigonometric, and piecewise defined. The graphing calculator is an integral part of the course.

Prerequisite: B-/C+ (with teacher’s approval) or better average in subject area from previous year.

**LY166  AP CALCULUS  5.0 CREDIT  GRADE 12**

The Advanced Placement (AP) Program gives students the opportunity to pursue college-level studies in high school and to receive advanced placement, college credit, or both in college. Students prepare for the AP Calculus examination in May using the Calculus AB syllabus. Students should be able to work with functions represented in a variety of ways, understand and use derivatives to solve a variety of problems, understand the definite integral as the limit of Riemann sums and use to solve a variety of problems, understand the Fundamental Theorem of Calculus, communicate mathematics orally and in written form, use technology to solve problems, experiment, interpret results, and verify conclusions.

Prerequisite: Pre-calculus and department approval

**LY341  ALGEBRA III & TRIGONOMETRY  5.0 CREDITS  GRADE 12**

This course in advanced algebra topics and trigonometry is designed for the college bound student who has successfully completed Algebra II and Geometry. Topics include: algebraic equations and inequalities; patterns and functions including polynomial functions, rational functions, conic sections, exponential and logarithmic functions, trigonometric functions; analytic geometry; systems of equations and inequalities; matrices determinants; sequences; data analysis, and probability.

Prerequisite: Algebra II and Geometry

**LY342  DISCRETE MATHEMATICS  2.5 CREDITS  GRADE 12**

Discrete Mathematics is a semester course that focuses on the six unifying themes specified by the National Council of Teachers of Mathematics Curriculum Standards: modeling, use of technology, algorithmic thinking, recursive thinking, decision making, and mathematical induction. Topics include voting methods, fair decision schemes, apportionment methods, circuits and networks, graph theory and trees, scheduling problems, and growth and symmetry including fractal geometry. A graphing calculator is suggested.

Prerequisite: Algebra II and Geometry

**LY 345  PROBABILITY & STATISTICS  2.5 CREDITS  GRADE 12**

This is a semester course in statistics. The focus of the course is on data analysis and real-world applications. Aspects of statistics included are variation, data collection, graphic display of data, concepts underlying inference, and problem solving skills. Examples and exercises are based on realistic data drawn from a variety of disciplines. The graphing calculator is essential to the course.

Prerequisite: Algebra II and Geometry
SCIENCE PROGRAM

The science program seeks to promote both an interest and awareness of science as a problem-solving tool to be used in all aspects of life. The course offerings are designed to develop in students the skills and attitudes necessary to succeed in the pursuit of their technical career and in the world of academics. Students are inspired to change their perception of science from something that happens in a laboratory to a process that occurs in all facets of daily life. The strong correlation between scientific and technical competencies is reinforced throughout the four year program.

Students will receive instruction in and develop a level of competence in the following areas:

- using the methods of inquiry to participate in scientific investigation and technological problem solving
- analyzing the diversity, complexity, and interconnectedness of life on earth
- examining the physical world around us, using the methods of physical sciences to learn about the composition, structure, properties, and reactions of matter and the relationships between matter and energy
- applying and integrating scientific, engineering, and/or technological knowledge in areas that include, but are not limited to: transportation, construction, communication, hospitality and health services.

LY 120   AP BIOLOGY II – w/lab  6.0 CREDITS  GRADE 12
AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes—energy and communication, genetics, information transfer, ecology, and interactions.
Prerequisite: Must meet departmental requirements.

LY 401   HONORS BIOLOGY I – w/lab  6.0 CREDITS  GRADE 9
This course places emphasis on the cell as the functional unit of life. The chemical and structural similarities of organisms are studied from the lowest form of plant life and animal life to the human individual. The interactions are tailored to complement various concepts of biology, which are studied in-depth by the student. Instruction conforms to the Life Science standards in the Massachusetts State Frameworks.
Prerequisite: Must meet departmental requirements.

LY402/*LY077   BIOLOGY I W/LAB  6.0 CREDITS  GRADE 9
This course focuses on the fundamental concepts of life and life processes. Students explore the structure and function of the body, the evolution of organisms and the interaction of organisms and their environment. The primary objective of the course is to foster an understanding of the diversity and complexity of living organisms as students explore such topics as plant and animal physiology; photosynthesis and cellular respiration; DNA, RNA and protein synthesis; principles of evolution; ecology and the environment. This laboratory course stresses conceptual development, science inquiry skills, and critical thinking, data analysis and experimental design. The standards are aligned with the DESE Framework for high school biology. Students will develop skills in writing and content knowledge to prepare for the MCAS exam.
*LY077 - In this course, modifications to the above curriculum are made as dictated by students’ Individual Education Plans.
LY403  BIOLOGY II  W/LAB  6.0 CREDITS  GRADE 10
This course explores major concepts in evolution and the diversity of life. The course focuses on the evolution of and the anatomy and physiology of organisms from the 6 kingdoms of living things. The course revolves around the themes of evolution and structure being related to function.

Prerequisite: Biology I

LY465  ECOLOGY  2.5 CREDITS  GRADES 11-12
This course will provide an in-depth study of the interaction among organisms and between those organisms and their environment. The students will develop an understanding of what an ecosystem is and the elements that determine the types and numbers of organisms that live in them. They will look at the atmosphere, the hydrosphere and the lithosphere, how each biotic factor helps to sustain the biosphere, and how the biotic factors of the biosphere interact with each of the other spheres. Ecology also refers to any form of biodiversity, from the biology of the smallest bacteria to the global flux of atmospheric gases that are regulated by photosynthesis and respiration as organisms breath in and out of the biosphere. Studying all of life’s processes will help students explain and understand the adaption and evolution of all life. Strong analysis and synthesis skills will be developed and used extensively in all work done in this course.

Prerequisite: Biology and teacher recommendation

LY413  CHEMISTRY I W/LAB  6.0 CREDITS  GRADE 10 - 11
This course is designed to teach students the nature, composition, and properties of matter utilizing inquiry, laboratory experiences, engineering and technological methods. Students will apply logical thinking skills in the solution of a variety of practical chemistry related problems as they investigate the topics of: properties of matter; matter and energy; atomic structure and electron configuration; organization of the periodic table and atomic bonding, chemical reactions; how heat differs from other forms of energy; gases and liquids; solutions; acids and bases; and chemical and nuclear reactions. Instruction is linked to laboratory applications which enable students to demonstrate an understanding of the nature of matter and chemicals as it applies to materials encountered and situations occurring in their technical programs and in everyday lives. The standards are aligned with the DESE chemistry strands.

Prerequisite: Algebra I / Biology I

LY411  HONORS CHEMISTRY I w/lab  6.0 CREDITS  GRADES 10-12
A more intense study of chemistry; the course covers many of the same topics as College Chemistry I, but in more depth. Other topics include kinetics, equilibrium, rates of reactions, solubility product, ionization constant, balancing complex rates and reactions and thermodynamics. All the topics in this course are included in the Chemistry Achievement Test. Problem solving weekly labs and more intense homework assignments are included in this class.

Prerequisite: Algebra I / Biology I
LY406 HONORS ANATOMY & PHYSIOLOGY – w/lab 6.0 CREDITS GRADES 11-12

Cell and tissue levels of organization are presented as the foundation for understanding organs and organ systems. Laboratory activities include both actual and virtual dissections. This course is recommended for students planning to enter the nursing or medical profession and/or any student who has a desire to learn more about the human body.

Prerequisite: Honors Biology I or Biology I / Chemistry I

LY424 PHYSICS I W/LAB 6.0 CREDITS GRADE 12

This course integrates the principles of physics with laboratory experimentation and problem solving applications. Students will learn to apply logical thinking skills in the solution of a variety of practical and theoretical scientific problems. Units of study include: motion; forces; vectors; momentum; work, power, simple machines, energy, circular motion, magnetism, center of gravity, sound and light. Aligned with the Massachusetts Science and Technology Curriculum Framework, these topics are explored from a mechanical, fluid, electrical and thermal systems approach. Physics instruction is linked to actual laboratory applications that enable students to relate physic principles and procedures to their technical trade area, as well as everyday lives.

Prerequisite: Algebra I

LY420 HONORS PHYSICS I w/lab 6.0 CREDITS GRADES 11-12

This course places emphasis on problem solving aspects of classical Newtonian mechanics which includes rectilinear and curvilinear motion. Heat, waves, sound, light and optical concepts are also studied in depth. Labs are conducted throughout the year to supplement the course work.

Prerequisite: Algebra I

LY126 AP PHYSICS B W/LAB 6.0 CREDITS GRADE 12

AP Physics B courses are designed by the College Board to parallel college-level physics courses that provide a systematic introduction to the main principles of physics and emphasize problem-solving without calculus. Course content includes mechanics, includes topics in both classical and modern physics. Labs are conducted throughout the year to supplement the course work.

Prerequisite: Algebra II

LY408 MARINE BIOLOGY W/ LAB 3.0 CREDITS GRADES 11-12

This course concentrates on the marine life typical of New England waters. Students study a variety of local organisms including sponges, jelly fish, clams, crabs, and fish. Both live and preserved specimens are studied as students learn about the structure and function of life in the oceans. Additional topics include the study of ocean water, currents, waves, pollution, ocean mining, and man’s influence on the marine environment.

Prerequisite: Biology I
This course provides an introduction to current biotechnology practices. The theory of biotechnology, along with hands-on laboratory experience, provides the student with a general background of the biotechnology industry. Biotechnology companies follow current good manufacturing practices (cGMP), which are regulated by the Food and Drug Administration (FDA). CGMP details quality management, buildings and design, equipment and personnel requirements, facility and equipment cleaning, production and process controls, packaging, labeling, complaint handling, and record keeping. Along with the theory and government regulations are general laboratory skills. These skills include preparation of solutions, pH measurements, microbiological techniques, spectroscopy, protein determination, and separation techniques (filtration, centrifugation, chromatography, and/or electrophoresis). In addition, students learn what job opportunities are available with a biotechnology education. Different careers offered in biotechnology companies are positions in manufacturing, Quality Control (QC), Quality Assurance (QA), Regulatory and/or Research and Development (R&D).

Prerequisite: Chemistry or enrolled in Chemistry
SOCIAL STUDIES PROGRAM

The social studies program is designed to provide LVTI students with the opportunity to develop their analytical capabilities in a variety of courses. The goal of the program is to prepare students to undertake the rights and responsibilities of citizenship, to enter the world of work, and to pursue higher education.

Aligned with the Massachusetts History and Social Studies Curriculum Framework, the courses will address the six strands of learning as identified in the Frameworks. All course work will be presented through the lenses of:

- time, continuity and change
- people and environments
- power and participation
- production and distribution
- cultures and identities
- interdependence

### LY200 HONORS WORLD HISTORY II (c.1750-)

5.0 CREDITS  
GRADE 9

This challenging survey course covers the rise of nation states in Europe and the economic and political roots of the modern world. Students will study the origins and consequences of the Industrial Revolution, 19th century political reform in Western Europe, and imperialism in Africa, Asia, and South America. They will learn the causes and consequences of the great military and economic events of the past century, including WW I, the Great Depression, WW II, the Cold War, and the Russian and Chinese revolutions. Finally, students will study the rise of nationalism and the continuing persistence of political, ethnic and religious conflict in many parts of the world.

Honors students should possess strong writing skills and must be willing to conduct independent research, read supplementary materials, analyze documents, and complete assigned projects.

Prerequisite: B+ or better average in subject area from previous year.

### LY201 WORLD HISTORY II (c. 1750-)

5.0 CREDITS  
GRADE 9

This survey course covers the rise of the nation state in Europe and the economic and political roots of the modern world. Students will study the origins and consequences of the Industrial Revolution, 19th century political reform in Western Europe, and the imperialism in Africa, Asia, and South America. They will learn the causes and consequences of the great military and economic events of the past century, including WW I, the Great Depression, WW II, the Cold War, and the Russian and Chinese revolutions. Finally, students will study the rise of nationalism and the continuing persistence of political, ethnic and religious conflict in many parts of the world.

### LY210 HONORS U.S. HISTORY I (1763-1877)

5.0 CREDITS  
GRADE 10

This course provides able and ambitious students with opportunities to participate in advanced work involving research, analysis, appraisal and evaluation of our history from the Road to Independence up to the late nineteenth century. Each student is expected to develop sensitivity for critical intelligent thinking on issues of nationwide historical concern. The course includes selected reading, independent research and writing of reports. The student is made aware of the tremendous impact various groups and individuals have made on the development of our country as a unique nation. Effort is made to increase student awareness of the traditions, principles, and institutions of this nation.

Honors students should possess strong writing skills and must be willing to conduct independent research, read supplementary materials, analyze documents, and complete assigned projects.

Prerequisite: B+ or better average in subject area from previous year.
### LY211  U.S. HISTORY I (1763-1877)  5.0 CREDITS  GRADE 10

The exciting period from 1763-1877 will be covered in U.S. History I. The course examines the historical and intellectual origins of the United States during the Revolutionary and Constitutional eras. The basic framework of American democracy and the basic concepts of American government such as popular sovereignty, debate between the Federalist and Anti-Federalist over the ratification of the Constitution, separation of powers, establishment of political parties, and individual rights will be studied. In addition, emphasis will be placed on economic and social changes that occurred during that time frame as well as the course and consequences of westward expansion. Finally, students will learn about the growth of sectional conflict, how sectional conflict led to the Civil War and the consequences of the Civil War including Reconstruction. Map skills, reading and interpreting charts and graphs and the utilization of primary source material will be covered. Students will develop skills in writing and content knowledge in order to prepare for the MCAS History exam.

### LY 230  HONORS U.S. HISTORY II (1877-PRESENT)  5.0 CREDITS  GRADE 11

This course is a continuation of Honors U.S. History I, with the same degree of intensity demanded. Studies begin with the Twentieth Century and continue to the present day, emphasizing America’s changing role in the world. Selected readings, special projects, and reports – both written and oral – are required of students taking this advanced course. Honors students should possess strong writing skills and must be willing to conduct independent research, read supplementary materials, analyze documents, and complete assigned projects.

Prerequisite: B- or better in Honors US History I or B+ or better in US History I.

### LY231  U.S. HISTORY II (1877-PRESENT)  5.0 CREDITS  GRADE 11

U.S. History II will cover the geography and history of the United States from 1877-present by presenting the political, economic, social, and cultural development of the country throughout the eras. All aspects of American life will be addressed including the impact of art, music, religion, business, industry, politics and the global economy. As students investigate the major events that have shaped America and the world over the past 125 years, they will demonstrate an understanding of the moral, religious and ethical issues surrounding the course topics; the causes and impact of war on shaping the world as we know it, the ideas that have challenged the status quo and the institutions created during this time period which satisfied the needs of the people and regulated their activities. Students will explore history through an analysis of primary source documents: they will analyze and evaluate multiple perspectives and develop and articulate their own points of view in preparation for the MCAS History exam.

Prerequisite: U.S. History I

### LY235A  HISTORY 20TH CENTURY  2.5 CREDITS  GRADE 12

This course focuses on events that shaped the modern world and America’s dominant role in it.

### LY245  HIST. AND STRUCTURE OF AMER GOV’T  2.5 CREDITS  GRADE 12

This course examines the fundamental principles and basic structures of all levels of American government. Students will analyze American political and economic systems and compare them with those of other nations.

### LY261  SOCIOLOGY  2.5 CREDITS  GRADE 12

This college level elective course is a factual study of the sociological structure. The functions, meaning, and processes of societies’ subcultures, customs, and institutions are examined. The following areas are studied: man and his environment (culture, society, etc.), cultural heritage, social interaction, personality problems.
## ENGLISH LEARNER PROGRAM

### LY101T  ENGLISH 9  5 CREDITS  GRADE 9
This course provides the students with a foundation in the fundamentals of language, literature and composition. Course content includes literary genres and terms, including drama, poetry, fiction, and nonfiction. In addition, this course provides opportunities for students to practice the kinds of writing, the writing process, and to express themselves in a variety of modes.

### LY812a  ESL 1  5 CREDITS  GRADE 9 - 12
This course is intended for students at the Entering English proficiency level who need intense English language instruction emphasizing social and academic language in the four domains of language (listening, speaking, reading, and writing). This course will focus on the development of communicative language skills through vocabulary development, oral communication, reading and writing. (REVISED DESCRIPTION)

### LY111T  ENGLISH 10  5.0 CREDITS  GRADE 10
English 10 continues the study of language and usage, concentrates composition work on essay writing, and expands the in-depth study of literary genres. Reading, writing, speaking, and listening provide the platform for the development of more demanding and extensive writing assignments as well as for close reading and discussion of more difficult literary works.

### LY813a  ESL 2  5 CREDITS  GRADE 9 – 12
This course is intended for students at the Emerging English proficiency level who need intense English language instruction emphasizing social and academic language in the four domains of language (listening, speaking, reading, and writing). This course will focus on the development of communicative language skills through vocabulary development, oral communication, reading and writing. (REVISED DESCRIPTION)

### LY121T  ENGLISH 11  5.0 CREDITS  GRADE 11
The purpose of this course is to achieve mastery of mechanics and usage through the practice of written and oral activities, to continue vocabulary development, to expand critical thinking skills, and to survey American literature. Learning research skills will be an important part of the writing program, and student-centered-learning activities will encourage continuing development of each individual's academic maturity.

### LY814  ESL 3  5 CREDITS  GRADE 9 – 12
This course is designed for Developing EL students who need additional ESL instruction. The 4 domains of language are addressed with emphasis on reading and writing domains of language. (REVISED DESCRIPTION)

### LY815  ESL 4 (NEW)  5 CREDITS  GRADE 9 – 12
This course is designed for Developing EL students who need additional ESL instruction. The four domains of language are addressed with emphasis on reading and writing domains of language.
LY322T  GEOMETRY  5.0 CREDITS  GRADE 10
Students will acquire and demonstrate knowledge of the concepts, definitions and geometric language, and will be extended with introducing geometric concepts in a structured format. Topics of plane and solid geometry will include coordinate plane, perpendicularity, inequalities, congruence, similarity, parallelism, circles, polygons, areas of polygonal regions, and volumes of solids. An introduction to coordinate geometry and trigonometry functions is provided.

LY301T  ALGEBRA I  5.0 CREDITS  GRADE 9
Course topics include properties, multi-shapes, solution of equations, rational numbers and their applications, equations and inequalities, linear relations and inequalities, polynomials, factoring, rational expressions, functions and graphs, and statistics and probability. The role of the scientific calculator as a problem solving tool is stressed and integrated into lessons and exercises throughout the course, while the graphing calculator and computer graphing software are addressed somewhat.

LY312T  ALGEBRA II  5.0 CREDITS  GRADE 9-12
Students will acquire and demonstrate knowledge of the concepts, definitions and algebraic language with a particular focus on functions, graphing and data analysis. Integrated topics include number sense, patterns, relations, functions, geometry, measurement, data analysis, statistics, and probability.

LY402T  BIOLOGY I w/lab  6.0 CREDITS  GRADE 9
Students will learn the basic concepts relating to Life Science. The main focus of instruction will be on the parts of the body and the functioning of the body systems. Emphasis will be on developing language through these topics. The standard science curriculum will be followed with modifications provided, as needed, using supplementary ESL materials. Some laboratory experience will be included.

LY403T  BIOLOGY II  6.0 CREDITS  GRADE 9-12
Students will learn the basic concepts relating to Life Science. The main focus of instruction will be on the parts of the body and the functioning of the body systems. Emphasis will be on developing language through these topics. The standard science curriculum will be followed with modifications provided, as needed, using supplementary ESL materials. Some laboratory experience will be included.

LY211T  U.S. HISTORY I  5.0 CREDITS  GRADE 10
This course offers an overview of the history and development of the United States from colonial times to the Civil War. Students will learn of the impact that various individuals and cultures have had on the social, political, and economic development of the United States.

LY231T  U.S. HISTORY II  5.0 CREDITS  GRADE 11
This course offers an overview of the history and development of the United States from the Civil War to present day. Students will learn of the impact that various individuals and cultures have had on the social, political, and economic development of the United States.
LY846T  U.S. HISTORY & STRUCTURE OF THE AMERICAN GOVERNMENT  5.0 CREDITS  GRADE 11-12

This course examines the fundamental principles and basic structure of all levels of American government. Students will analyze American political systems at the local, state, and federal levels. Major areas of student will include federalism, separation of powers, checks and balances, and important Supreme Court decisions.

LY201T  WORLD HISTORY 2  5.0 CREDITS  GRADE 9

This survey course covers the rise of the nation state in Europe and the economic and political roots of the modern world. Students will study the origins and consequences of the Industrial Revolution, 19th century political reform in Western Europe, and the imperialism in Africa, Asia, and South America. They will learn the causes and consequences of the great military and economic events of the past century, including WW I, the Great Depression, WW II, the Cold War, and the Russian and Chinese revolutions. Finally, students will study the rise of nationalism and the continuing persistence of political, ethnic and religious conflict in many parts of the world.
WORLD LANGUAGE PROGRAM

Aligned with the Massachusetts Curriculum Frameworks, the Spanish program prepares students to:

- use the communication skills of listening, speaking, reading and writing
- gain knowledge and understanding of other cultures
- develop insight into the nature of language and culture by comparing their own language and culture to another
- make connections with other subject areas and acquire information
- participate in communities at home and around the world in another language

Spanish

LY501 SPANISH I

This course is designed to introduce students to the Spanish language and culture. In addition, students will be introduced to the basic speech and expressions that will provide a foundation for the development of communication skills. Emphasis is placed on developing listening and pronunciation skills, grammatical structure, and beginning techniques in reading and writing. Students develop fluency in using basic phrases in daily communication in order to provide and obtain information, express feelings and emotions, and exchange information. Instruction is planned so as to increase students’ ability to read simple material and to write short communications within the limits of the structures and vocabulary learned. Instructors will use a variety of visuals and technology to complement class work and textual materials.

LY504 SPANISH II

This course begins with a comprehensive review of the grammar and vocabulary covered in Spanish I and continues to stress the primary linguistic skills while introducing increasingly more complex structural patterns. Emphasis is placed on listening, speaking, and vocabulary expression for personal communication and understanding of the Spanish-speaking world.

Prerequisite: Spanish I

LY504 SPANISH III

This course, a continuation of Spanish II, includes a review of what has been previously learned as well as the introduction of more advanced grammatical structures. Using practical vocabulary, students continue to develop and refine the skills of listening, speaking, and vocabulary expression for personal communication and understanding of the Spanish-speaking world.

Prerequisite: Spanish II or placement exam

LY504 SPANISH IV

This course combines language and literature for the students who have studied the basic concepts of Spanish. The goal of this course is to achieve a cultural insight with authentic literature. Concentration and emphasis is on vocabulary expansion, (for personal communication and understanding of the Spanish-speaking world.

Prerequisite: Spanish III
ELECTIVES

LY759  HEALTH  2.5 CREDITS  GRADES  9

This course is a basic introduction to health. It includes growth and development, mental/emotional health, personal health, family life and health nutrition, disease prevention and control, consumer health, drug use and abuse, and community health and management.

LY761  PHYSICAL EDUCATION  2.5 CREDITS  GRADES  9

The over-all goal of the LVTI physical education program is to promote a sense of self-awareness and well-being in all of our students. The activities of this integrated program are designed to develop a sound mind in a sound body which will assist each student to meet the daily challenges of the mental, emotional, social, and physical aspects of health. While developing lifelong skills and techniques in a variety of physical activities, students will develop an understanding and appreciation of the value of fair play and sportsmanship.

LY609  Commercial Design  2.5 CREDITS  GRADES  11-12

This course is a basic introduction commercial design. Students will gain skills in graphic design, computer illustration and digital photo enhancement and relate these skills to practical career applications.

LYEE00  EMPLOYABILITY/ENTREPRENEURSHIP  2.5 CREDITS  GRADE  12

TECHNICAL PROGRAMS

Lynn Vocational Technical Institute is committed to providing its students with the highest level of health and safety instruction as prescribed in Strand I of the Massachusetts Vocational Technical Education (VTEC) Frameworks.

Within each technical program, students will receive on-going instruction in personal and shop safety. Students will be accountable to define and demonstrate program-specific health and safety regulations and practices in addition to being able to demonstrate correct responses to situations that threaten health and safety. Students will be tested annually in each technical program on the acquisition of shop specific health and safety knowledge and skills.

Financial Assistance

Lynn Vocational Technical Institute is committed to the success of all of its students. No student shall be denied access to a technical program based on the inability to meet the financial obligations associated with the tools/supplies required for participation in the program. Parents/guardians may apply to the director/principal for assistance.
**Technical Programs**

Each student in grades 10-12 specializes in a technical program based upon his/her interests and abilities. Below are the fifteen technical programs:

<table>
<thead>
<tr>
<th>Automotive Collision Repair and Refinishing</th>
<th>Heating, Ventilation, Air Conditioning and Refrigeration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Technology</td>
<td>Health Assisting</td>
</tr>
<tr>
<td>Carpentry</td>
<td>Information Technology &amp; Networking</td>
</tr>
<tr>
<td>Cosmetology</td>
<td>Metal Fabrication and Joining Technology</td>
</tr>
<tr>
<td>Culinary Arts</td>
<td>Plumbing</td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td>Pre-Engineering</td>
</tr>
<tr>
<td>Electricity</td>
<td>Machine Tool Technology</td>
</tr>
<tr>
<td>Graphic Communications</td>
<td>Programming and Web Development</td>
</tr>
<tr>
<td></td>
<td>Radio &amp; Television Broadcasting</td>
</tr>
</tbody>
</table>
### CVTE EMBEDDED COURSES

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>LY762</td>
<td>PHYSICAL EDUCATION/HEALTH</td>
<td>0.5</td>
<td>10-12</td>
</tr>
<tr>
<td>LY608</td>
<td>COMPUTER LITERACY</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>LYCGEX</td>
<td>CAREER GUIDANCE</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>LYCV01</td>
<td>CVTE STRANDS 1</td>
<td>0.5</td>
<td>10-12</td>
</tr>
<tr>
<td>LYCV01a</td>
<td>CVTE STRANDS 1</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

#### LY762 PHYSICAL EDUCATION/HEALTH

The course, embedded into the student’s technical program, is to promote a sense of self-awareness and well-being in all of our students. The activities of this integrated program are designed to develop a sound mind in a sound body which will assist each student to meet the daily challenges of the mental, emotional, social, and physical aspects of health. While developing lifelong skills and techniques in a variety of physical activities, students will develop an understanding and appreciation of the value of fair play and sportsmanship.

#### LY608 COMPUTER LITERACY

This course addresses Strand 6 and is designed to provide instruction and skill development experiences so that students will be able to demonstrate proficiency in the use of computers and applications and gain an understanding of concepts underlying hardware, software, and connectivity. The acquisition of computer skills inherent in word processing techniques, organization of data, use of photographic representations, research projects and other project-based activities is covered. Students are shown the responsible use of technology and provided an understanding of ethics and safety issues in using electronic media. They are provided an understanding of how computers are used to increase efficiency, accuracy, and professionalism in the industry providing the ability to use technology for research, problem solving and communication in the workplace. This course is embedded into their exploratory program.

#### LYCGEX CAREER GUIDANCE

The purpose of this rotation in Exploratory is to guide the student through the process of career decision making and career planning. It will include a Self-assessment and help to determine individual student interests. These will then be used to match these interests to occupations and higher education training options including college. Students will become familiar with career planning resources, identify personal interests and personality traits and match these interests to academic and technical course selections and future occupations and. In addition, they will perform occupational research, identify educational/training requirements including skills/abilities needed for specific professions, research future earnings potential and participate in goal-setting activities.

#### LYCV01 CVTE STRANDS 1

Strand 1: Health and Safety: Students will understand safety, OSHA and EPA regulations regarding their chosen technical field in this course embedded into their technical program. In grade 11, students are required to and pass the 10 hour OSHA certification.

#### LYCV01a CVTE STRANDS 1

Strand 1: Health and Safety: Students will understand safety, OSHA and EPA regulations regarding their chosen Technical field in this course embedded into their exploratory program.
Strand 4: Employability Skills: Students will understand the important skills required to become a valuable employee in their chosen technical field.

Strand 5: Management and Entrepreneurship Skills: Students will understand the process of managing The program uses active learning to employ varied academic and technical skills in realistic situations. While one of the primary focuses lies in instructing students on how to start and operate a business enterprise, students also learn and apply valuable skills from many academic subjects. Verbal and social skills are developed through the completion of group projects and independent presentations. Students will learn task management to coordinate the long and short term projects required in the program. Math skills are needed to calculate and resolve problems that arise in business situations. Students must attain reading mastery to analyze and evaluate reading material and apply the information to their project. Critical thinking is developed and encouraged through varied projects and problem solving exercises. Cultural awareness and civic responsibility will be addressed. This course is embedded into their technical program.

LYCV45a  CVTE STRANDS 4 AND 5  GRADE  9

Strand 4: Employability Skills: Students will understand the important skills required to become a valuable employee in their chosen technical field.

Strand 5: Management and Entrepreneurship Skills: Students will understand the process of managing The program uses active learning to employ varied academic and technical skills in realistic situations. While one of the primary focuses lies in instructing students on how to start and operate a business enterprise, students also learn and apply valuable skills from many academic subjects. Verbal and social skills are developed through the completion of group projects and independent presentations. Students will learn task management to coordinate the long and short term projects required in the program. Math skills are needed to calculate and resolve problems that arise in business situations. Students must attain reading mastery to analyze and evaluate reading material and apply the information to their project. Critical thinking is developed and encouraged through varied projects and problem solving exercises. Cultural awareness and civic responsibility will be addressed. This course is embedded into their exploratory program.
AUTOMOTIVE COLLISION REPAIR AND REFINISHING

The Automotive Collision Repair and Refinishing Program is an intensive three-year NATEF (National Automotive Technician Education Foundation) certified training program that emphasizes the application of skills in all areas of automobile collision trade. This program provides training with the latest technology utilizing hands-on experiences in all aspects of vehicle repair and reconditioning including sheet metal work, unibody alignment, MIG welding, collision repair, computerized estimating and finish painting. This program is in the process of “going green” by implementing waterborne paint into the program.

The ninth grade exploratory program emphasizes shop safety and the basic skills needed in the auto collision trade. In addition, instruction is provided on the use of tools and application procedures. The use of visual demonstrations and hands-on experiences provide students with an excellent introduction to a career in this exciting field.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>LYAC09</td>
<td>AUTO COLLISION REPAIR AND REFINISHING</td>
<td>2.5</td>
<td>9</td>
</tr>
<tr>
<td>LYAC10</td>
<td>AUTO COLLISION REPAIR AND REFINISHING</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>LYAC11</td>
<td>AUTO COLLISION REPAIR AND REFINISHING</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>LYAC12</td>
<td>AUTO COLLISION REPAIR AND REFINISHING</td>
<td>15</td>
<td>12</td>
</tr>
</tbody>
</table>

Students who select automotive collision repair and refinishing as their major course of study will be provided with instruction and experiences that will enable them to apply and demonstrate the acquisition of competencies in the following areas:

- Proper use of measuring, hand and power tools
- Inspecting & repairing frames
- Preparing and executing a repair plan
- Repairing and adjusting outer panels
- Finishing and painting automotive bodies
- Repairing mechanical and electrical components
- Repairing plastics and using adhesives
- Opportunity to earn SP2 Safety & Pollution Prevention Training Certificate
- OSHA 10-hour, First Aid AND CPR Certifications
- SP2 Certification
- EPA GH Painter Certification

Career opportunities upon completion of the program include, but are not limited to:

- Postsecondary Education in Collision Repair Technologies
- Eligible to apply for; ASE National Institute for Automotive Service Excellence, One-year trade credit towards two-year requirement
- ASE Certification
- automobile painter
- automobile assembler
- frame technician
- automobile detailer
- dealer prep person
- insurance estimator
- glass installer
- parts specialist
- paint technician
- auto body equipment salesperson
- insurance claims adjuster
AUTOMOTIVE TECHNOLOGY

The Automotive Technology Program designed to provide young men and women with the knowledge and critical thinking skills required to meet the growing demands of the automotive industry. Students are trained to diagnose and repair automotive problems in a fully equipped shop environment using training aides as well as customer and donated vehicles. This exciting three-year program is a NATEF (National Automotive Technician Education Foundation) certified training program and the instructors hold ASE (Automotive Service Excellence) Certifications. Students receive on-going instruction in personal and shop safety and will be able to demonstrate correct responses to situations that threaten health and safety.

Grade nine exploratory students are introduced to the various opportunities available in the automotive industry. Students receive thorough instruction in personal and shop safety, basic tool identification and operation of shop equipment. Hands-on learning is emphasized.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>LYAT09</td>
<td>AUTOMOTIVE TECHNOLOGY 9</td>
<td>2.5</td>
<td>9</td>
</tr>
<tr>
<td>LYAT10</td>
<td>AUTOMOTIVE TECHNOLOGY 10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>LYAT11</td>
<td>AUTOMOTIVE TECHNOLOGY 11</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>LYAT12</td>
<td>AUTOMOTIVE TECHNOLOGY 12</td>
<td>15</td>
<td>12</td>
</tr>
</tbody>
</table>

The students who select automotive technology as their major course of study will receive on-going instruction in personal and shop safety. They will be accountable to define and demonstrate related health and safety regulations and practices in addition to being able to demonstrate correct responses to situations that threaten health and safety. Students will be tested annually on shop safety and procedures. Automotive technology students will participate in the OSHA 10-hour occupational safety and health training program.

The young men and woman who select automotive technology as their major course of study will be provided with instruction and experiences that will enable them to apply and demonstrate the acquisition of competencies in the following areas:

- Demonstrate proper measuring procedures
- Demonstrate proper use of hand and power tools
- Diagnosing & repairing steering and suspension systems
- Diagnosing & repairing general, hydraulic, drum and disc brake systems
- Diagnosing & repairing electrical, starting, charging, lighting & driver information systems
- Diagnosing & repairing general and computerized engine problems
- Diagnosing & repairing ignition and emission systems
- OSHA 10-hour Certification
- First Aid Certification
- CPR Certification

Upon successful completion of this technical program, students will be better prepared for:

- Postsecondary Education
- Automotive Technician
- Aircraft or Marine Technician
- Heavy Equipment Technician
- Brake & Exhaust Repair
- Auto Equipment Sales
CARPENTRY

Carpentry is a program that prepares young men and women to apply technical knowledge and skills to lay-out, fabricate, erect, install, and repair wooden structures and fixtures using hand and power tools as they prepare for a career in residential construction. In addition, the program will prepare individuals to apply technical knowledge and skills to set-up and operate industrial woodworking machinery and to use such machinery to design and fabricate wooden components and complete articles. Throughout the program, students will be exposed to various job situations where problem solving and decision-making will be tested and evaluated. Accuracy and precision will be required. Students will be instructed in state and local building codes as well as current changes in laws.

The ninth grade exploratory program introduces students to the career opportunities in the carpentry field. Shop safety practices are stressed. They will receive exposure to measuring instruments, hand tools, portable and stationary woodworking equipment and building materials.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>LYCA09</td>
<td>CARPENTRY 9</td>
<td>2.5</td>
<td>9</td>
</tr>
<tr>
<td>LYCA10</td>
<td>CARPENTRY 10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>LYCA11</td>
<td>CARPENTRY 11</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>LYCA12</td>
<td>CARPENTRY 12</td>
<td>15</td>
<td>12</td>
</tr>
</tbody>
</table>

The young men and women who select carpentry as their major course of study will be provided with instruction and experiences that will enable them to apply and demonstrate the acquisition of competencies in the following areas:

- Technical Mathematics
- Blueprint Reading
- Framing
- Job Estimating
- Construction Material Selection
- Foundations and Roughing
- Applications of codes and standards
- Use of hand and power tools
- Use of ladders and scaffolding
- Framing floors, walls, ceilings and roofs
- Finishing the interior and exterior of wooden structures
- Performing commercial carpentry tasks
- OSHA 10-hour Certification
- First Aid Certification
- CPR Certification

Upon completion of this technical program opportunities include, but are not limited to:

- Postsecondary Education
- Architecture
- Civil Engineering
- Carpenters Union
- Apprenticeship Training
- Remodeling Contractor
**COSMETOLOGY**

Cosmetology is the scientific study and practices of beauty culture. Our program is designed to prepare students for a career in this continually evolving field as a professional beauty technician. An active on-site clinic provides students with the opportunity to refine their skills in a fully equipped salon setting. Appropriate equipment and chemical use safety procedures and sanitation practices are taught and reinforced as the students interact with a client base from the Lynn area. The LVTI Cosmetology program is aligned with the Massachusetts Vocational Technical Frameworks as well as the State Board of Cosmetology. Once they reach the age of 16, students have the opportunity to acquire the 1,000 hours mandated to be eligible to take examination for Board Certification.

The exploratory program stresses shop and professional safety, sanitation and personal hygiene, and a clear understanding of license requirements. The ninth graders will participate in basic mannequin work and procedures in braiding, shampooing, scalp treatments, facial cleansing and nail care. Students will explore the many job opportunities in the cosmetology fields.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>LYCO09</td>
<td>COSMETOLOGY 9</td>
<td>2.5</td>
<td>9</td>
</tr>
<tr>
<td>LYCO10</td>
<td>COSMETOLOGY 10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>LYCO11</td>
<td>COSMETOLOGY 11</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>LYCO12</td>
<td>COSMETOLOGY 12</td>
<td>15</td>
<td>12</td>
</tr>
</tbody>
</table>

The young men and women who select cosmetology as their major course of study will be provided with instruction and experiences that will enable them to apply and demonstrate the acquisition of competencies in the following areas:

- Effective Customer Service skills.
- Effective related business managerial and financial skills
- Demonstrate proper shampooing procedures
- Demonstrate proper hair styling techniques
- Performing hair, scalp and facial treatments
- Performing make-up application
- Manicure procedures
- Hair shaping, coloring procedures and techniques
- Performing permanent waving and hair relaxing procedures
- With accomplished skills and accumulated time in shop during high school, students become eligible to take the MA State Cosmetology License Exam
- OSHA 10-hour Certification
- First Aid Certification
- Hairdresser – Massachusetts division of Registration of Cosmetologist

Career Opportunities upon completion of this technical program include, but are not limited to:

- Postsecondary Education
- Licensed Cosmetologist
- Salon Owner
- Make-up Artist
- Color Technician
CULINARY ARTS

Culinary Arts is a comprehensive cooking and baking program, where young men and women become involved in the entire spectrum of the food industry including planning, preparation and presentation. The Tiger’s Den restaurant is located within the school where meals and bakery items are prepared and served to the public. Lynn Tech is committed to providing its students with the highest level of health and safety instruction. As prescribed in the VTEC frameworks, as well as local and state regulations dealing with food preparation and service.

Ninth grade exploratory students receive an exciting introduction to the world of hospitality. Students, working as teams, will acquire a hands-on overview of hot food preparation, baking and restaurant operation. Students will be introduced to the food service industry standards that are necessary for success in the field of baking, restaurant operations and culinary arts.

<table>
<thead>
<tr>
<th>LYCU09</th>
<th>CULINARY ARTS 9</th>
<th>2.5 CREDITS</th>
<th>GRADE 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>LYCU10</td>
<td>CULINARY ARTS 10</td>
<td>10 CREDITS</td>
<td>GRADE 10</td>
</tr>
<tr>
<td>LYCU11</td>
<td>CULINARY ARTS 11</td>
<td>15 CREDITS</td>
<td>GRADE 11</td>
</tr>
<tr>
<td>LYCU12</td>
<td>CULINARY ARTS 12</td>
<td>15 CREDITS</td>
<td>GRADE 12</td>
</tr>
</tbody>
</table>

Throughout the three year program, students will be provided with instruction and experiences that will enable them to apply and demonstrate the acquisition of skills in the following areas:

- Food service
- Dining room service activities
- Host or hostess duties
- Basic nutrition
- Hospitality sales and marketing
- Starches, marinades and dressings
- Banquet and catering services
- Utility services
- Preparing fruits and vegetables
- Preparing stocks, sauces, and thickening agents
- Preparing soups, meats, seafood and poultry
- Grade manager, hors d’oeuvres and appetizers baking and dessert preparation
- OSHA 10-hour Certification
- First Aid Certification
- CPR Certification
- ServSafe Certification

Upon successful completion of the culinary arts program, career opportunities include, but are not limited to:

- Line Cooks
- Pastry Chefs
- Events Manager
- Banquet Server
- Executive Chef
- Franchise Restaurant Owner
In the Early Education and Care program, students learn growth & development of young children, responsibilities of the childcare teacher, and the importance of a professional attitude. Students will learn how to incorporate materials & activities that are developmentally and interest appropriate in a variety of educational and social settings. In addition, student will understand the responsibilities of childcare, the importance of communication with others, and the need to project a professional appearance. They will gain an understanding of prenatal care, birth, and the developmental milestones in the early years of life. Students are exposed to educational pedagogy and experiences in areas including toddler care, pre-K and kindergarten. They are provided with practical experiences in the Cubbies Den and the Early Education center in the Annex.

Ninth grade exploratory students receive an overview of early education and care with experiences in the Cubbies Den and the Early Education center in the Annex.

Throughout the three year program, students will be provided with instruction and experiences that will enable them to apply and demonstrate the acquisition of skills in the following areas:

- CPR & First Aid Certification
- Child Growth & Development
- Classroom Management
- Articulation with: North Shore Community College
- Portfolio Development
- Building Strong Family Relationships
- Daycare Teacher
- Design and Maintain a Positive Learning Environment
- Curriculum Planning and Assessment
- Early Education Care Level 1: Teacher Preschool and Infant Toddler
- OSHA 10 hour certification
- First Aid Certification
- CPR Certification

Upon successful completion of the Early Childhood Education and Care program, career opportunities include, but are not limited to:

- Home Day Care
- Special Education Teacher
- Preschool Teacher-Daycare
- Infant/Toddler, Preschool and Before & After School Programs
- Childcare Centers Owner/Operator
**ELECTRICITY**

In the Electricity Program, young men and women learn to install electrical equipment for lighting, heating and power applications in commercial, industrial & residential buildings according to the Massachusetts Electrical Code. Students use commercial tools and equipment and work in a shop with simulated residential and industrial work areas. Shop safety practices are constantly stressed. Through demonstrations and shop activities, students will be exposed to wiring procedures, splicing of conductors and work with bell and cable wiring. Students have the opportunity to complete 1200 hours of work experience toward an electrical apprenticeship in this program.

The ninth grade exploratory program introduces students to the career opportunities in the electrical field. Shop safety practices are stressed. Through demonstrations and simple shop activities, students will be exposed to basic wiring procedures including switches, lighting and receptacles. They will have an opportunity to perform the basic splicing of conductors and to work with bell and cable wiring. Students will discover the many career opportunities available in the electrical field.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>LYEL09</td>
<td>ELECTRICITY 9</td>
<td>2.5</td>
<td>9</td>
</tr>
<tr>
<td>LYEL10</td>
<td>ELECTRICITY 10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>LYEL11</td>
<td>ELECTRICITY 11</td>
<td>12.5</td>
<td>11</td>
</tr>
<tr>
<td>LYEL01</td>
<td>ELECTRICITY RELATED</td>
<td>2.5</td>
<td>11</td>
</tr>
<tr>
<td>LYEL12</td>
<td>ELECTRICITY 12</td>
<td>12.5</td>
<td>12</td>
</tr>
<tr>
<td>LYEL02</td>
<td>ELECTRICITY RELATED</td>
<td>2.5</td>
<td>12</td>
</tr>
</tbody>
</table>

Electricity students will be provided with instruction and experiences that will enable them to apply and demonstrate the acquisition of skills in the following areas:

- National and Massachusetts Electrical Code
- Print reading
- The use of tools, fasteners and test equipment
- Basic and advanced concepts of electrical theory
- Installing raceways, boxes, fittings, transformers, cable wiring
- Installing, splicing and terminating conductors
- Applying concepts of industrial, commercial and residential wiring
- Using motors
- Installing and maintaining lighting luminaries and alarm systems
- Electrical students acquire time that counts toward Eligibility to take the test for an Electrician’s License which is 600 classroom hours and 8000 hands on training under the supervision of a licensed Electrician
- OSHA 10-hour Certification
- First Aid Certification

Career opportunities upon completion of this technical program include, but are not limited to:

- Electrical Apprenticeship Program
- Industrial Wiring Technician
- Electrical Designer
- Electrical Engineer
- Class C and D Security and Fire Alarm Systems
ENGINEERING TECHNOLOGY

Engineering Technology is based on the MA Department of Elementary and Secondary Education (DESE) Career Technical Education (CTE) Chapter 74 Engineering Technology Curriculum Frameworks and Project Lead the Way (PLTW) which LVTI partners with to develop the engineering course of study. Students explore technology systems and engineering processes to find out how math, science, and technology can be used to solve real-world problems using principles of engineering. Students also are introduced to the concepts of robotics & three-dimensional designing using modeling software. All fields of engineering have underlying content areas in common and collaboration occurs with several other trade areas.

The ninth grade exploratory program introduces students to technology systems and engineering processes to find out how math, science, and technology can be used to solve real-world problems using the engineering design process.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>LYEG09</td>
<td>ENGINEERING TECHNOLOGY 9</td>
<td>2.5</td>
<td>9</td>
</tr>
<tr>
<td>LYEG10</td>
<td>ENGINEERING TECHNOLOGY 10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>LYEG11</td>
<td>ENGINEERING TECHNOLOGY 11</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>LYEG12</td>
<td>ENGINEERING TECHNOLOGY 12</td>
<td>15</td>
<td>12</td>
</tr>
</tbody>
</table>

Students will be provided with instruction and experiences that will enable them to apply and demonstrate the acquisition of competencies in the following areas:

- PLTW- IED (Introduction to Engineering Design)
- Autodesk Inventor software
- AutoCAD software
- SolidWorks software
- Bridge Designer software
- Working as a contributing member of a team
- Develop thinking, problem solving, research, diagnostic and troubleshooting skills
- Leading a team
- Understanding the potential impact their ideas and products may have on society
- Public speaking, listening to the needs of others.
- Managing time, resources and projects
- Going beyond the classroom for answers
- Data collection and analysis
- Preparing for two and four year college programs
- OSHA 10-hour Certification
- First Aid Certification
- CPR Certification

Career opportunities upon completion of this technical program include but are not limited to:

- Architecture Technician
- CAD Technician
- Civil Engineering Technician
- Electrical Engineering Technician
- Mechanical Engineering Technology
GRAPHIC COMMUNICATIONS

Graphic Communications is a program designed to instruct young men and women in the various aspects of the printing and publishing industries as they relate to design, pre-press, and post-press as well as the art of Screen Printing. Students will use computers utilizing software specific for design and desktop publishing, as well as pre-press operations and estimating.

The students who select Graphic Communications as their career major will receive ongoing instruction in personal and shop safety as well as troubleshooting and problem-solving in a realistic student/instructor/client atmosphere. Graphics students have recently partnered with students in Life Skills to run our copy center, “Paw Prints”. Lynn Tech has an articulation agreement with North Shore Community College.

The exploratory program introduces 9th grade students to the industry standard software. They explore their talents in graphic design, computer illustration and digital photo enhancement. Shop safety practices are stressed.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>LYGC09</td>
<td>GRAPHIC COMMUNICATIONS 9</td>
<td>2.5</td>
<td>9</td>
</tr>
<tr>
<td>LYGC10</td>
<td>GRAPHIC COMMUNICATIONS 10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>LYGC11</td>
<td>GRAPHIC COMMUNICATIONS 11</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>LYGC12</td>
<td>GRAPHIC COMMUNICATIONS 12</td>
<td>15</td>
<td>12</td>
</tr>
</tbody>
</table>

Students will be provided with instruction and experiences that will enable them to apply and demonstrate the acquisition of skills in the following areas:

- Ability to design graphics using Adobe CS-6 Software
- Computer design using State-of-the-Art MAC computers
- Job estimating using Franklin Estimating software
- Basic and advanced concepts of Graphic Communications theory and Layout & Design
- Customer Service procedures including order expediting, scheduling, and billing.
- Pre-production, production and post-production practices
- Offset press operation
- Effective bindery practices
- Applying printing knowledge to production processes
- Adobe Certification
- OSHA 10-hour Certification
- First Aid Certification

Upon successful completion of the graphic communications technology program, career opportunities include, but are not limited to:

- Postsecondary Education
- Digital Imaging Specialist
- Graphic Designer
- Press Operator
- Desktop Publisher
- Screen Printer
HEALTH TECHNOLOGY

Health Technology is an excellent program for young men and women who are interested in the high demand area of health care and human services. Students are provided with a knowledge based in human behavior and development, geriatrics, nursing assistant skills, medical terminology, and nutrition. Students work toward meeting both classroom and clinical requirements to be eligible for state and/or national certification testing. Students preparing for the Certified Nurse Assistant (CNA) certification focus on the care of the resident or patient in an in-patient setting. Students work in a variety of settings including extended nursing care, and rehabilitative facilities, gaining experience communicating and working with the elderly. There is a strong emphasis on mathematics and written verbal communication skills that are necessary for the health care professional.

Ninth grade exploratory students are introduced to the many career opportunities in the health technology field. Shop/clinical safety practices are stressed. A wide variety of techniques are used to stimulate student curiosity and assist students in assessing their suitability for a career in the health field. Hands-on experience is provided in the classroom and laboratory environment.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>LYHT09</td>
<td>HEALTH TECHNOLOGY 9</td>
<td>2.5</td>
<td>9</td>
</tr>
<tr>
<td>LYHT10</td>
<td>HEALTH TECHNOLOGY 10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>LYHT11</td>
<td>HEALTH TECHNOLOGY 11</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>LYHT12</td>
<td>HEALTH TECHNOLOGY 12</td>
<td>15</td>
<td>12</td>
</tr>
</tbody>
</table>

Health technology students will be provided with instruction and experiences that will enable them to apply and demonstrate the acquisition of competencies in the following areas:

- Orientation to Health Care
- Responding to and Assisting clients in the activities of daily life
- Health care office management
- Measuring, documenting and reporting client information
- Performing special procedures
- Administering comfort measures to clients
- Assisting clients with nutrition and hydration
- Assisting cognitively impaired clients
- Necessary skills to successfully pass State CNA licensing exam and the State CAN licensing exam during sophomore and junior years
- OSHA 10-Hour Certification
- First Aid Certification
- Phlebotomy Training
- Alzheimer’s 13-hour Certification
- EKG/ECG Training (75 hours)

Upon successful completion of this program, career opportunities include, but are not limited to:

- Nursing
- Certified Nurse Assistant
- Home Health Aid
- Hospital Clerk
- Surgical Technician
- Paramedicine
- Occupational Therapy
- Physical Therapy
HEATING, VENTILATION, AIR CONDITIONING, AND REFRIGERATION PROGRAM

Grade 9 Exploratory/In shop after placement in technical program

The freshman program offers the opportunity to demonstrate their abilities in a series of hands-on projects designed to acquaint students with the HVAC&R industry. Students learn to wire series and parallel electric circuits and how to use a volt and ohmmeters. Copper soldering, brazing, and assorted connecting techniques are introduced. Safety issues and career opportunities are stressed.

Grade 10 Shop

Sophomores spend substantial time learning to blend, flare, solder and braze copper tubing. They also work on various wiring projects, with strong concentration on basic electricity and basic controls wiring, and from these projects gain skills in using pictorial and ladder schematics as well as voltmeters, ohmmeters, and amprobe meters. Students also begin to design various refrigeration piping schemes and apply them to multiple refrigerant applications. Tasks such as installing manifold gauges, vacuum pumps, recovery units, and charging cylinders to refrigeration units are also covered. Students spend substantial time taking the basic skills they have learned and applying them to troubleshoot basic electrical and refrigeration problems using multi-meters and manifold gauges.

Grade 10 Related

The initial focus of this course is the laws of thermodynamics, heat transfer methods, and refrigeration components (compressors, condensers, metering devices, evaporators). Refrigerant characteristics and safety issues are also discussed in detail. The application of standard refrigeration components, including filter driers, receivers, solenoid valves, sight glasses, and pressure controls) is reviewed, as are compressor-starting components, applications, and trouble-shooting methods.

Grade 11 Shop

Junior shop students move through a succession of increasingly complex projects to hone their skills. They begin with a gauge procedure in which they learn to properly install gauges, perform efficiency tests, isolate the compressor, pump down the system, and remove gauges. With these skills mastered, students concentrate on more advanced HVAC&R projects, including those dealing with split air conditioning systems, gas and oil heating systems, hot water boilers, freezer stations, and appliances including refrigerators, winder air conditioners, ice machines, and commercial air conditioner systems. In each case, these projects all serve to reinforce such basic skills as gauge procedure, electrical power, meter use, soldering, brazing and silver soldering.

Grade 11 Related

Junior related students focus on electrical principles, components, meters, schematics, and systems applied to modern small and large scale HVAC installations. Troubleshooting, servicing, and installing are covered in depth. The principles of refrigeration containment are also stressed.
**Grade 12 Shop**

Senior students increase their level of responsibility by participating in the Co-op Program. If they should remain in shop, they may work on projects in the school, including preventive maintenance of the building's HVAC&R equipment (rooftop units, water bubblers, walk-in freezers, and refrigerators). Students also become more skilled at sizing equipment, designing and laying out duct systems, and installing split air conditioning systems and ventilation systems in classrooms. Seniors also work on automobile air conditioning systems and a variety of other equipment brought in for repair by local businesses and the general public.

**Grade 12 Related**

Seniors review the basic refrigeration cycle, along with a concentration on commercial applications. They also gain knowledge of hydronic heating systems (single loop, split-loop diverter -tee, and pumping away methods) and the calculation of heat loss/gain methods. Additionally, they cover the design, installation, and troubleshooting of sheet metal ductwork.

**Licensing/Certifications:**

- 10-hour OSHA Certificate
- EPA Section 608 Refrigeration Certification
INFORMATION TECHNOLOGY & NETWORKING

Information Technology & Networking professionals learn the architecture, structure, functions and components of the Internet and other computer networks. Students will be able to build simple LANs, configure routers and switches for basic through advanced functionality, and implement IP addressing schemes. The course enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students will be able to describe the internal components of a computer, assemble a computer system, install an operating system, and troubleshoot using system tools and diagnostic software. Students will also be able to connect to the Internet and share resources in a network environment. Students will have the opportunity to earn the following certifications: *Cisco CCENT and CCNA; and CompTIA IT Fundamentals, A+, and Networking +*. Additionally, Networking Academies offers courses in Security, Linux, Programming, Entrepreneurship, Mobil Devices, and Internet of Things.

The ninth grade exploratory student is introduced to the basic knowledge and skills necessary to pursue study in Information Technology & Networking and learn of the professional opportunities available to graduates of this program. Shop safety is stressed.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>LYIT09</td>
<td>INFORMATION TECHNOLOGY &amp; NETWORKING 9</td>
<td>2.5</td>
<td>9</td>
</tr>
<tr>
<td>LYIT10</td>
<td>INFORMATION TECHNOLOGY &amp; NETWORKING 10</td>
<td>12.5</td>
<td>10</td>
</tr>
<tr>
<td>LYIT11</td>
<td>INFORMATION TECHNOLOGY &amp; NETWORKING 11</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>LYIT12</td>
<td>INFORMATION TECHNOLOGY &amp; NETWORKING 12</td>
<td>15</td>
<td>12</td>
</tr>
</tbody>
</table>

Students will be provided with instruction and experiences that will enable them to apply and demonstrate the acquisition of competencies in the following areas:

- Installation, configuration, upgrading of hardware and software
- Preventative maintenance
- Basic Networking
- Diagnosing and troubleshooting
- Implement a switched network
- Implement an IP addressing scheme
- Implement a routed network
- Identify security threats to a network
- OSHA 10-hour Certification
- First Aid and CPR Certifications
MACHINE TOOL TECHNOLOGY

Machine Tool Technology Shop is a newly re-opened program offering at LVTI based on the MA Department of Elementary and Secondary Education (DESE) Career Technical Education (CTE) Chapter 74 Manufacturing, Engineering and Technology Services Occupational Cluster. The Machine Tool Technology program is designed to prepare students for entry-level work in a machine shop. The students will learn, through hands-on training, the use of Milling Machines, Lathes, Grinders, Saws and C.N.C (Computer Numerical Control) machining. Students will also be introduced to the concepts of robotics and three-dimensional designing using modeling software.

The ninth grade exploratory program introduces students to hands-on training, the use of Milling Machines, Lathes, Grinders, Saws and C.N.C (Computer Numerical Control) machining.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>LYPM09</td>
<td>PRECISION MACHINING 9</td>
<td>2.5</td>
<td>9</td>
</tr>
<tr>
<td>LYPM10</td>
<td>PRECISION MACHINING 10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>LYPM11</td>
<td>PRECISION MACHINING 11</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>LYPM12</td>
<td>PRECISION MACHINING 12</td>
<td>15</td>
<td>12</td>
</tr>
</tbody>
</table>

Students will be provided with instruction and experiences that will enable them to apply and demonstrate the acquisition of competencies in the following areas:

- Blue Print Reading
- Machine Shop Theory & Practicing
- Applied Machine Shop Mathematics
- Inspection of Finished Parts
- Geometric Dimensioning and Tolerancing
- CNC Programming
- CNC Set-up & Operation
- CNC Lathe
- Vertical Machining Center (VMC)
- Practical and efficient use of Mastercam X6 Design
- Mill Programming
- Two Dimensional Design
- Three Dimensional Design
- OSHA 10-hour Certification
- First Aid Certification
- CPR Certification

Career opportunities upon completion of this technical program include but are not limited to:

- Machine Operators
- Maintenance Machinists
- Tool Inspectors
- Parts Inspectors
- CNC (Programmers/Operators)
- Job, Shop and Experimental Machinists
METAL FABRICATION AND JOININGS TECHNOLOGY

The metal fabrication and joinings technology program is designed to train and develop young men and women to become skilled fabricators, welders and sheet metal workers. Instruction is delivered by NIMS certified teachers. Welding is the most common way to permanently join metal parts and therefore, is the core component of this program. In the process, heat applied to metal pieces melts and fuses them together. Because of its strength, welding is used in the building of ships, automobiles, and aircraft. It is also used to join beams in the construction of buildings, bridges and other structures. Students are introduced to the safe use of equipment in both forming and welding various metals. Strong emphasis is placed on the development and application of mathematical skills. Students receive instruction in a supervised laboratory atmosphere within the technical program and participate in supervised off-campus projects.

The ninth grade exploratory program introduces students to the safe use of equipment in both forming and welding various metals. Students will receive hands-on basic skill training in gas metal arc welding. Included in the program is the fabrication and welding of small projects in the shop environment.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>LYMC09</td>
<td>METAL FAB AND JOININGS TECHNOLOGY 9</td>
<td>2.5</td>
<td>9</td>
</tr>
<tr>
<td>LYMC10</td>
<td>METAL FAB AND JOININGS TECHNOLOGY 10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>LYMC11</td>
<td>METAL FAB AND JOININGS TECHNOLOGY 11</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>LYMC12</td>
<td>METAL FAB AND JOININGS TECHNOLOGY 12</td>
<td>15</td>
<td>12</td>
</tr>
</tbody>
</table>

Metal fabrication and joinings technology students will be provided with instruction and experiences that will enable them to apply and demonstrate the acquisition of competencies in the following areas:

- Applying principles of industry quality standard operations.
- Demonstrating and applying the design and manufacturing process.
- Problems solving, diagnosing, troubleshooting.
- Operating hand & power tools
- Maintaining equipment & machinery
- Using measurement devices.
- Explaining the fundamentals of metal fabrication & joining.
- Performing the oxy-acetylene, shielded metal arc, flux, core arc, and the gas tungsten arc welding.
- Performing the oxy-fuel gas & plasma cutting process.
- Performing the carbon arc gauging & spot welding processes.
- Laying out of materials according to standards.
- Joining metals.
- Performing mechanical cutting operations.
- Skills needed to take the Welding Certification test
- First Aid Certification

Career opportunities upon completion of this technical program include, but are not limited to:

- Apprenticeship programs
- Structural, mechanical or metallurgical engineering
- Art colleges for architectural metal designs or metal art construction
- Metal shop welder / fabricator
- Structured steel ironworker
PLUMBING

Plumbing is a licensed trade that requires not only strong technical knowledge and skills but also a thorough understanding of the Massachusetts State Plumbing and Fuel Gas Code. The students in this program will also develop skill in blueprint reading, natural and propane gas piping, water and heat piping, drainage and various types of gas hydronic heating systems. This hands-on program allows the student to assemble various components of plumbing and heating systems in a supervised laboratory atmosphere within the technical program and participate in supervised off-campus projects. The curriculum consists of problem solving projects that require individual attention, as well as teamwork to complete.

The ninth grade exploratory program introduces students to the safe use of equipment used in the plumbing trade. Students will receive hands-on basic skill training in plumbing and pipefitting in the shop environment.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>LYPP09</td>
<td>PLUMBING 9</td>
<td>2.5</td>
<td>9</td>
</tr>
<tr>
<td>LYPP10</td>
<td>PLUMBING 10</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>LYPP00</td>
<td>PLUMBING RELATED GR. 10</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>LYPP11</td>
<td>PLUMBING 11</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>LYPP01</td>
<td>PLUMBING RELATED GR. 10</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>LYPP12</td>
<td>PLUMBING 12</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>LYPP02</td>
<td>PLUMBING RELATED GR. 10</td>
<td>5</td>
<td>12</td>
</tr>
</tbody>
</table>

Students will be provided with instruction and experiences that will enable them to apply and demonstrate the acquisition of competencies in the following areas:

- Reading and interpreting prints
- Describing the fundamentals of the plumbing trade
- Installing fixtures
- Explaining the fundamentals of venting systems
- Installing fuel gas systems
- Installing drainage, waste, and vent piping
- Installing roof and area drains
- Servicing a plumbing system
- Identifying features of and regulations relating to water supplies
- Plumbing students must acquire 550 class hours and 8700 shop hours (1750 per year), this adds up to five years. Upon graduation the student will have completed 330 class hours and 1750 shop hours. Once he gets his Apprentice license, he can continue to get is 230 hours and work 3 years in order to go for his Journeyman’s license.
- OSHA 10-hour Certification
- First Aid Certification
- CPR Certification

Career opportunities upon completion of this technical program include but are not limited to:

- Postsecondary Education
- Gas Fitters
- Journeyman Plumber
- Plumbing and Heating Maintenance
- Master Plumber
- Oil Burner Technician
PROGRAMMING AND WEB DEVELOPMENT- COMPUTER TECHNOLOGY

Computer programmers write detailed instructions that tell computers how to perform tasks. They determine the steps that must be followed and the processes that must be completed in each step. Programmers tell the computer which information to access, how to process it, and what equipment to use. Many programmers work with existing programs. They update, modify and expand these programs based on the needs of their clients. Programmers use one or more of the advanced languages available to encode their instructions. Students will be exposed to hardware and software currently used in office settings. They will be instructed in the design, creation, debugging and implementation of a Web page.

The ninth grade exploratory student is introduced to the theory of computing, the history of the Internet, and the professional opportunities available to graduates of this program. Students will be exposed to the hardware and software currently used in office settings. Shop safety is stressed.

<table>
<thead>
<tr>
<th>LYCT09</th>
<th>PROGRAMMING AND WEB DEVELOPMENT</th>
<th>9</th>
<th>2.5 CREDITS</th>
<th>GRADE 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>LYCT10</td>
<td>PROGRAMMING AND WEB DEVELOPMENT</td>
<td>10</td>
<td>10 CREDITS</td>
<td>GRADE 10</td>
</tr>
<tr>
<td>LYCT11</td>
<td>PROGRAMMING AND WEB DEVELOPMENT</td>
<td>11</td>
<td>15 CREDITS</td>
<td>GRADE 11</td>
</tr>
<tr>
<td>LYCT12</td>
<td>PROGRAMMING AND WEB DEVELOPMENT</td>
<td>12</td>
<td>15 CREDITS</td>
<td>GRADE 12</td>
</tr>
</tbody>
</table>

Students will be provided with instruction and experiences that will enable them to apply and demonstrate the acquisition of competencies in the following areas:

- Describe Basic Network Technologies
- Applying Problem Solving and Trouble Shooting Techniques
- Explaining Programming Concepts
- Classifying and Installing Computer Hardware
- Implementing and Managing Software
- Creating HTML Documents
- Identifying and Explaining Security and Risk Awareness Issues
- Demonstrating Project Management Skills
- Testing and Following Quality Assurance Processes
- Using HTML, Cascading Style Sheets and JavaScript in the Creation of a Website
- Using XML
- Designing, Creating, Publishing, and Maintaining a Website
- OSHA 10-hour Certification
- First Aid and CPR Certifications
- AP Java Programming worth 3 college credits at most colleges/

Career opportunities upon completion of this technical program include, but are not limited to:

- Postsecondary Education
- Computer Systems Management
- Computer Engineering
- Computer Systems and Analysis
- Computer Design Engineering
- Software Engineering
- Programming
- Computer Forensics
- Database Administration
RADIO AND TELEVISION BROADCASTING

Radio and Television Broadcasting is a three-and-a half-year production course offered at Lynn Vocational Technical Institute. In today’s world, most people can’t get through a day without coming in contact with some form of media: television, film, radio, internet, publication magazines, newspapers, cell phone headlines, etc. Students are introduced to a wide variety of production processes in both the shop and related environment. There is an emphasis placed on understanding the role that software and hardware play in the structuring of visual, auditory and motion elements to communicate through television, radio and media. Through basic studio multi-camera exercises and handheld field production assignments, students become familiar with the tools of the medium and the processes involved in media production. To familiarize students with the complex and multilevel activities involved in television production individual and team projects are assigned to help students learn the functions, potentials and limitations of the video equipment and the facilities.

The ninth grade exploratory program is designed to introduce students to the many career opportunities available to a radio and television broadcasting professional. They will be exposed to the basic equipment and procedures of the broadcasting shop. Safety practices will be stressed.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>LYTV09</td>
<td>RADIO AND TELEVISION BROADCASTING 9</td>
<td>2.5</td>
<td>9</td>
</tr>
<tr>
<td>LYTV10</td>
<td>RADIO AND TELEVISION BROADCASTING 10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>LYTV11</td>
<td>RADIO AND TELEVISION BROADCASTING 11</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>LYTV12</td>
<td>RADIO AND TELEVISION BROADCASTING 12</td>
<td>15</td>
<td>12</td>
</tr>
</tbody>
</table>

Students will be provided with instruction and experiences that will enable them to apply and demonstrate the acquisition of competencies in the following areas:

- Pre-production, production and post-production practices
- Identification and defining the fundamentals of broadcasting and video technologies and broadcast journalism
- Brainstorming an idea, producing a project to fruition, editing and exporting to DVD
- Experience with all formats including the new media for internet technology
- Producing a digital video
- Proficiency in all post-production software packages: Final Cut Pro Suite, Adobe Master Collection, Studio Maker and Microsoft Office
- OSHA 10-hour Certification
- First Aid Certification
- CPR Certification

Career opportunities upon completion of this technical program include, but are not limited to:

Public Relations
Media Advertising
Journalism and Photojournalism
Cellular sales
Radio announcing
Programming
Cable technician
Wedding videography
Audio engineering
Cable access production
APPLICATION FOR ADMISSIONS

Grade 9
It is the policy of the Lynn Public Schools not to discriminate on the basis of race, color, national origin, age, sex, religion, sexual orientation, disability, or home status in admission to, access to, treatment in, or employment in its programs and activities in compliance with Title VI and VII of Civil Rights Act of 1964, Title IX of the 1972 Education Amendments to the Civil Rights Act of 1964, Title IX of the 1972 Education Amendments to the Civil Rights Act, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination in Employment Act, the Americans with Disabilities Act, and M.G.L., Ch. 76. Sec. 5, M.G.L., Ch. 151B, and M.G.L., Ch. 151C.

LVTI has a published admission policy that is made available to all applicants and parent(s)/guardian(s) as part of the admission process. The policy gives the admission criteria, as well as a description of the entire admission process. You may obtain a copy of the admission policy by calling the Guidance Office at 781-477-7489.

This application form must be completed and submitted to the LVTI Guidance Office by the date specified in the LVTI school calendar. In addition to this application form, the applicant’s current guidance counselor will submit transcripts of the criteria that will be used for admission that includes the applicant’s grades, attendance record and discipline/conduct record. For fall admission, this would be terms 1 & 2 of the current school year and terms 1-4 of the previous school year.

<table>
<thead>
<tr>
<th><strong>APPLICANT SECTION</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applicant Name:</strong> Last:</td>
</tr>
<tr>
<td><strong>Home Address:</strong> Street and Number:</td>
</tr>
<tr>
<td>City/Town:</td>
</tr>
<tr>
<td>Home Phone #:</td>
</tr>
<tr>
<td>Current School:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>PARENT/GUARDIAN SECTION</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parent/Guardian Name:</strong> Last:</td>
</tr>
<tr>
<td><strong>Home Address:</strong> Street and Number:</td>
</tr>
<tr>
<td>City/Town:</td>
</tr>
<tr>
<td>Home Phone #:</td>
</tr>
<tr>
<td>Home Email:</td>
</tr>
</tbody>
</table>
GUIDANCE COUNSELOR SECTION

Please submit the transcripts of grades, attendance, and discipline/conduct as required by the LVTI Admission Policy.

Name of Guidance Counselor: ______________________

I will submit the required information by the due date. ☐ Yes ☐ No If no, please explain.

SIGNATURE SECTION

The statements and information furnished by the undersigned in this application form are true and complete.

The undersigned applicant’s parent(s)/guardian(s) give permission for representatives of the sending school to release the applicant’s records including, grades, attendance, and conduct/discipline records.

*Our signatures certify that we have read and agree with the above statements.*

<table>
<thead>
<tr>
<th>Signature of Student</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature of Parent/Guardian</td>
<td>Date:</td>
</tr>
<tr>
<td>Signature of Current Guidance Counselor</td>
<td>Date:</td>
</tr>
</tbody>
</table>

VOLUNTARY INFORMATION SECTION

The information requested in this section is not required for admission. Submission of the information is entirely voluntary. Information submitted voluntarily by the applicant will not affect the applicant’s admission to the school. The information, if supplied, will be used for monitoring equal educational opportunity in the school district. In addition, note that applicants with disabilities may voluntarily self-identify for the purpose of requesting reasonable accommodations during the entire application and admission process. Applicants who are English Learners may voluntarily self-identify for the purpose of receiving interpretive services during the entire application and admission process.

Gender: ☐ Female ☐ Male

Please answer the following two questions.

1. Select one: Are you Hispanic or Latino? ☐ Yes Hispanic or Latino is a person of Cuban, Mexican, Chicano, Puerto Rican, South or Central American or other Spanish culture or origin regardless of race. ☐ No Not Hispanic or Latino.

2. What is your race? You may select one or more. ☐ White ☐ Black ☐ American Indian or Alaskan Native ☐ Asian ☐ Native Hawaiian or other Pacific Islander

Person with a disability: ☐ Yes If yes, do you need accommodations during the application for admission process? ☐ Yes If yes, please describe the accommodations needed.

Person who is an English Learner ☐ Yes If yes, do you need language assistance during the application for admission process? ☐ Yes If yes, please describe the assistance needed.