Every Student Future Ready:

- Prepared for College
- Prepared for the Global Workplace
- Prepared for Personal Success

College & Career Readiness/Career & Technical Education

EL-7: Academic Program
ER 2: Content Knowledge
ER 3: Interdisciplinary Skills and Attributes

Lake Washington School District

Connecting Ends (ERs) and Means (ELs)

End Results specify the results that we what for our students and we expect them to know and be able to do

Executive Limitations specify the strategies and methods that we use to achieve End Results

ER 1: Mission and Vision	ER 2: Content Knowledge	ER 3: Interdisciplinary Skills and Attributes
Mission Each student will graduate prepared to lead a rewarding, responsible life as a contributing member of our community and greater society. **Vision** Every Student Future Ready: • *Prepared for College* • *Prepared for the Global Workplace* • *Prepared for Personal Success*	• Literacy & Language • Mathematical & Scientific Reasoning • Social Studies • Information & Communication Technology • Culture & the Arts • Career Planning & Life Management	• Academic Thinking Skills & Strategies • Communication & Collaboration Skills • Local & Global Citizenship Skills • Personal Attributes

1. Global Executive Constraint
2. Emergency CEO Succession
3. Communication and Counsel to the Board
4. Annual Report and District Calendar
5. Parents and Community
6. Student Learning Environment
7. **Academic Program**
8. Instructional Materials Selection
9. District Staff
10. Budgeting/Financial Planning
11. Financial Administration
12. Asset Protection
13. Facilities
14. Technology

Career Planning & Life Management

End Results specify what students are expected to know and be able to do

ER 2: Interdisciplinary Content Knowledge	ER 3: Interdisciplinary Skills and Attributes
Career Planning & Life Management • Demonstrates the necessary skills to locate and evaluate school and career information • Develops a future school and/or career plan • Understands and applies skills in personal finance literacy and consumerism in a capitalistic economic system • Develops healthy habits that include physical fitness and emotional well being • Understands and develops entrepreneurial and management skills and strategies	• Academic Thinking Skills and Strategies • Communication and Collaboration Skills • Local and Global Citizenship Skills • Personal Attributes

Executive Limitations specify the strategies and methods used to achieve End Results

EL 7:   Academic Program

☐ 7.1   Develop and implement an academic program that specifies:

- ■ Academic content and technology standards that meet or exceed state and nationally-recognized model standards;
- ■ Curriculum aligned with and designed to enable students to meet or exceed the established standards;
- ■ Assessments that will adequately measure each student's progress toward achieving the standards

College and Career Readiness

Department Mission

- Provide opportunities for every student to access rigorous and relevant career-connected learning that prepares students for post-secondary success and access to high-skill, high-wage and in-demand jobs

Lake Washington
School District

College and Career Readiness

- **High School and Beyond Plan**
  - Xello implementation
- **Career and Technical Education (CTE) Programs and Pathways**
  - CTE Dual Credit and guided pathway development
- **Business, Community and Higher Education Partnerships**
  - CTE Program Advisory Committees and General Advisory Council
  - Districtwide CTE student events and opportunities
  - Internship and youth apprenticeship opportunity development

Lake Washington
School District

High School and Beyond Plan

High School and Beyond Plan

A multi-year process that helps students:

Explore their learning styles and interests

Discover potential future careers

Research post-secondary education options

Identify career and educational goals

Connect high school course taking with their future goals:

- Two or Four-Year College
- Technical College
- Military
- Apprenticeship or Certificate Program
- Workforce

Lake Washington
School District

How We Support Students

What Students Do

- **Explore** their learning styles and interests
- **Discover** potential future careers
- **Research** post-secondary education options
- **Identify** career and educational goals
- **Connect** high school course taking with their future goals:
  - Two or Four-Year College
  - Technical College
  - Military
  - Apprenticeship or Certificate Program
  - Workforce

How We Support Students

Parents and Families

Teachers

Counselors

College and Career Centers and Specialists

Technology

Career and Technical Education

Dual Credit Opportunities

Lake Washington
School District

High School and Beyond Plan Efforts

2018 – 2019

☐ Implement new Xello platform

☐ Develop awareness and understanding of High School and Beyond Plan and Xello purpose and processes

Lake Washington
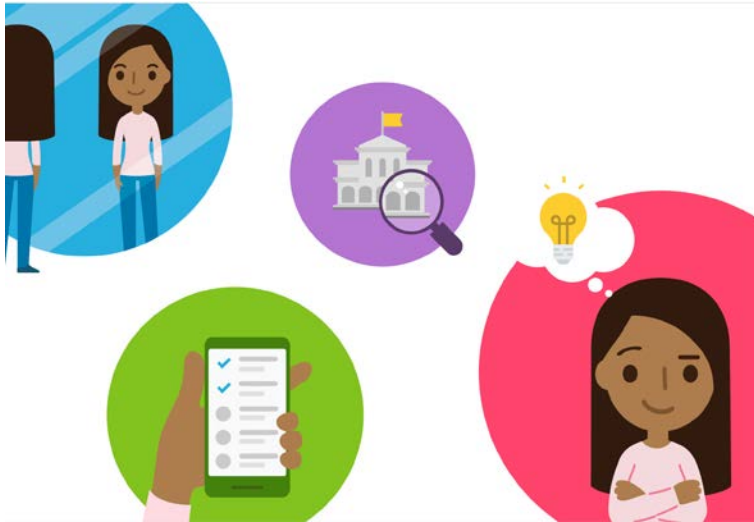School District

Xello

A secure, web-based, interactive program where students:

- **<u>Complete</u>** interactive activities that build self-knowledge
- **<u>Explore</u>** thousands of career and education options
- **<u>Develop</u>** a personalized plan that they update and refine each year until graduation

and

- **<u>Access</u>** Method Test Prep to prepare for the ACT or SAT

Lake Washington
School District

Xello Interactive Dashboard

Xello Interactive Lessons

Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
• Interests • School Subjects at Work • Decision Making	• Explore Learning Styles • Discover Learning Pathways • Biases and Career Choices	• Skills • Explore Career Matches • Transition to High School	• Personality Styles • Exploring Career Factors • Getting Experience	• Work Values • Careers and Lifestyle Costs • Workplace Skills and Attitudes	• Choosing a College or University • Career Demand • Entrepreneurial Skills	• Defining Success • Career Backup Plans • Job Interviews

Lake Washington
School District

High School and Beyond Plan Goals

2019 – 2020

☐ Continue to implement new Xello platform

☐ Strengthen awareness and understanding of High School and Beyond Plan and Xello purpose and processes

Lake Washington
School District

Career and Technical Education

Career and Technical Education (CTE)

CTE:

- Prepares students to be college and career ready by providing core academic skills, employability skills and technical, job-specific skills
- Offers clear pathways to industry certifications, postsecondary certificates and degrees
- Partners with businesses to prepare students for tomorrow's workforce

Association for Career and Technical Education

Why is CTE Important?

WHY IS CTE IMPORTANT?

13% ↑

IMPROVED GRADUATION RATES:
Students concentrating in CTE programs have a graduation rate 13% higher than the average national graduation rate.

1 YEAR = +2%

HIGHER WAGES:
Each additional year of advanced CTE coursework in high school drives a ~2% increase in wages.

DECREASED DROP-OUT:
Participating in CTE courses decreases risk of drop-out for students who are of average age or younger-than-average age upon entering high school.

2018 - Hanover Research

How Does CTE Benefit Students?

CTE Courses:

- Align with 16 nationally-recognized Career Clusters
- Incorporate both industry and academic standards
- Offer student leadership through Career and Technical Student Organizations (CTSOs)
- Often offer CTE Dual Credit
  - Ability to earn both high school and community/technical college credit
- Often provide Graduation Requirement Equivalency – "2-for-1"
  - Ability to earn one credit and meet two graduation requirements

2018- 19 CTE Participation

- Approximately **8,045** students participate in **124** different CTE course options, taught by **101** CTE teachers, providing students the opportunity to develop talents and interests in more specialized areas

16 Nationally-Recognized Career Clusters

This Photo by Unknown Author is licensed under CC BY-SA-NC
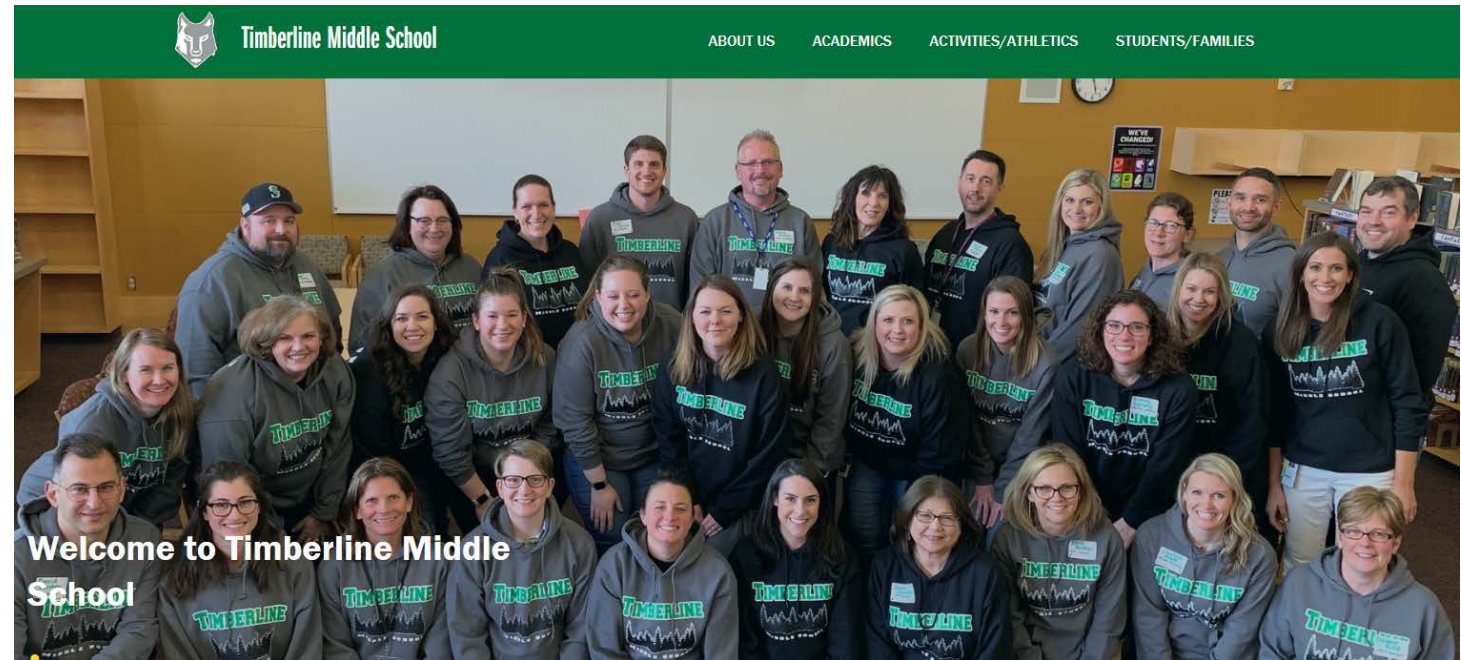
Six State-Approved Programs

1. Agriculture Education and Science

2. Business and Marketing

3. Family and Consumer Science

4. Health Science

5. Skilled and Technical Science

6. Science, Technology, Engineering and Mathematics (STEM)

2019-20 New Middle School Courses

- Farm to Table-Food Sustainability
- Flight and Space
- Food Science

2019-20 New High School Course Offerings

- Aerospace Engineering
- Teacher Education Academy (TEA)ch 1 & 2
  - Year 2 prepares students to earn Educational Para Pro certification
- Digital and Social Media Marketing
- Theater Design and Technology (WANIC)

Core Elements

Partnerships with Higher Education
- Articulation for college credit
- Summer visits to college campuses
- Interaction with partners college students

Alignment with Standards
- Educator Rising standard alignment
- CTE, Common Core State, and 21st Century Standards
- Standards mapped against curriculum units

Pathways into Careers as Educators
- Making use of Alternative Routes
- Para Educator certification through course
- District HR support for students who want to return to home district

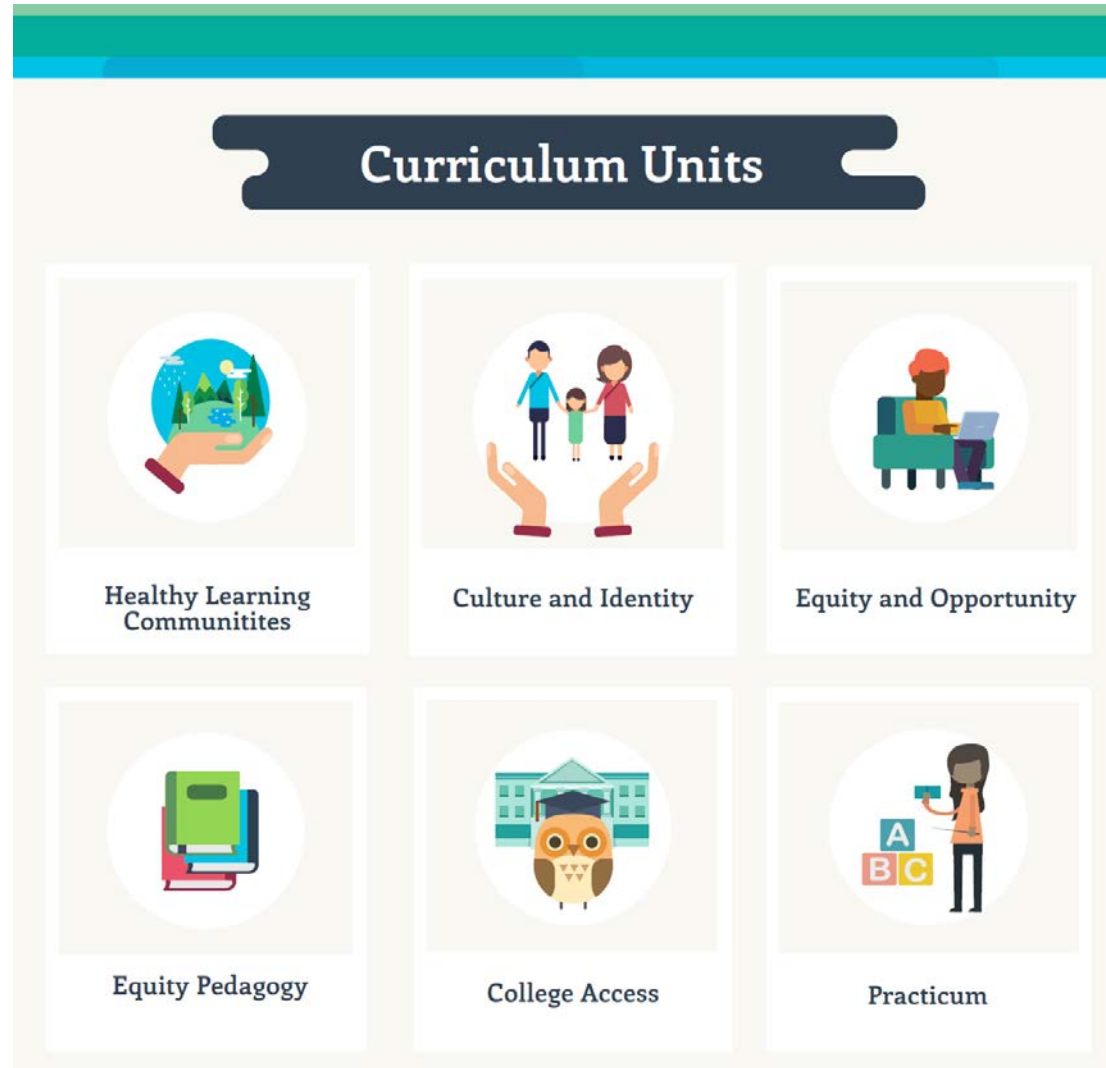More information can be found at the State of Washington Professional Educator Standards Board website

Source link:
https://pathways.pesb.wa.gov

Brought to you by:

STATE OF WASHINGTON
PROFESSIONAL EDUCATOR STANDARDS BOARD

Recruiting Washington Teachers

Curriculum Units

Healthy Learning Communitites

Culture and Identity

Equity and Opportunity

Equity Pedagogy

College Access

Practicum

WANIC Skill Center High School Courses

Bellevue	WANIC @ DigiPen	Issaquah	Lake Washington	Northshore	WANIC @ LWTech
• Automotive Technology • Automotive Technology 2 • Cisco Networking Academy CCNA • Cisco Networking Academy CCNP • Culinary Arts – Advanced • Health Science Careers/Nursing	• DigiPen Art & Animation 1 & 2 • DigiPen Music & Sound Design • DigiPen Video Game Programming 1 & 2	• Sports Medicine	• Theatre Design & Technology	• Automotive Technology • Automotive Technology 2 • Health Science Careers/Nursing	• Dental Careers • Fire and EMS 1 & 2 • Health Science Careers/Nursing • Medical Careers
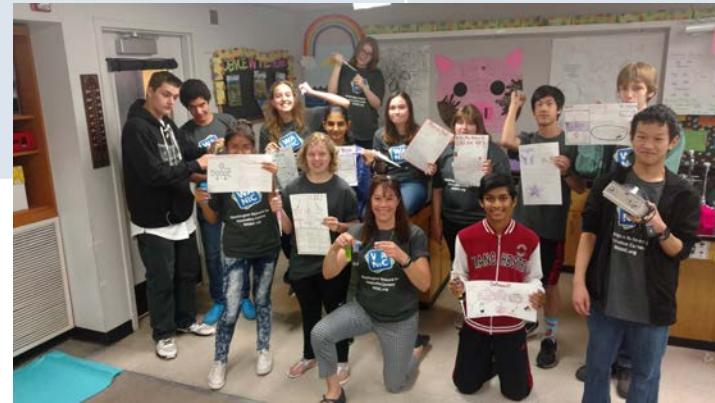
WANIC Skill Center Summer High School Courses

Bellevue	Everett	Issaquah	Lake Washington/WANIC	Northshore	Riverview
• Cinematography & Cinema Productions • DigiPen Art & Animation • DigiPen Video Game Programming • Photography • Python 1 • Radio/TV Broadcasting • Welding	• Biotechnology, Computer Aided Design (CAD) & 3D Printing • DigiPen Art & Animation • Music & Sound Design • Video Game Programming	• Intro to Computer Science • Photography	• Computer Science & Engineering • DigiPen Art & Animation • Cyber Security • Music & Sound Design • DigiPen Video Game Development • Dynamic DNA • Health • Intro to Dental Careers • Intro to Fire & Emergency Medical Services (EMS) Careers • Intro to Medical Careers • Intro to Nursing • Sustainable Green Design • Video Game Programming	• Biotechnology • Computer Science • Culinary • Health Science Careers • Welding	• Financial Planning • Freelance Art • Health • Photo & Video Fusion
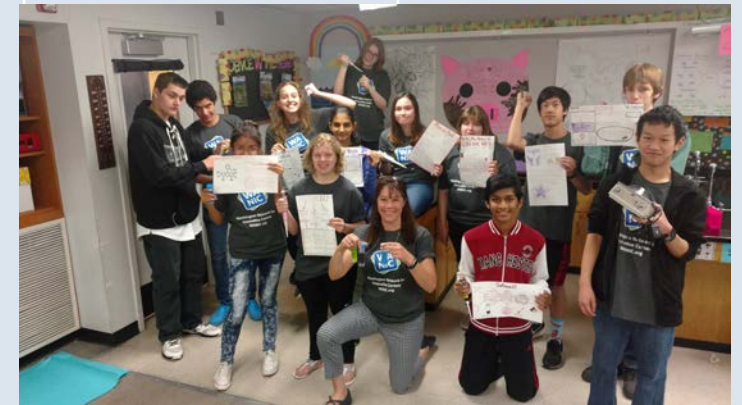
Career and Technical Education (CTE)

CTE:

- Prepares students to be college and career ready by providing core academic skills, employability skills and technical, job-specific skills
- Offers clear pathways to industry certifications, postsecondary certificates and degrees
- Partners with businesses to prepare students for tomorrow's workforce

Lake Washington
School District

Association for Career and Technical Education

ACTE

STEM Program and Pathway Articulation Efforts

2018 – 2019

- Assess/internally audit existing CTE Dual Credit offerings and CTE equivalencies
  - Begin to identify opportunities to intentionally expand CTE Dual Credit offerings to "package" a sequence of courses/pathway that aligns with and fulfills aspects of specific certificate or degree programs at community and technical colleges
- Assess middle to high school STEM pathways to ensure exposure to STEM learning at the middle school level
  - Implement STEM course offerings at Kamiakin Middle School
  - Develop STEM program offerings at Timberline Middle School for 2019-20 implementation

Lake Washington
School District

High School Courses by Career Cluster

Eastlake	Juanita	Lake Washington	Redmond	Tesla STEM
• Introduction to Engineering Design • Material Science 1	• Architectural and Engineering Tools and Techniques 1 & 2 • Applied Material Technology 1 & 2	• Computer Science and Engineering • Computer Integrated Manufacturing • Introduction to Engineering Design • Principles of Engineering • Robotics 1& 2	• Computer Science and Engineering	• Engineering 1, 2 & 3

Lake Washington	Redmond	Tesla STEM
• AP Environmental Science • Urban Gardening	• AP Environmental Science	• AP Environmental Science • Engineering/Sustainable Design

Health Science

Eastlake	Juanita	Lake Washington	Redmond	Tesla STEM
• Anatomy and Physiology • Biotechnology	• Biotechnology • Food Science and Nutrition	• Family Health	• Anatomy and Physiology • Biotechnology • Food Science and Nutrition • Health 1	• Anatomy and Physiology

Eastlake	Juanita	Lake Washington	Redmond	Tesla STEM
• AP Computer Science A • AP Computer Science Principles • Microsoft Imagine Academy	• AP Computer Science A • Computer Science • Computer Science and Engineering • Microsoft Imagine Academy	• AP Computer Science A • AP Computer Science Principles • Computer Science • Microsoft Imagine Academy	• AP Computer Science A • Microsoft Imagine Academy	• AP Computer Science A • AP Computer Science Principles • Computer Programming • Data Structures

- Through the Pacific Northwest College Credit Consortium, certain CTE courses provide students with the opportunity to earn both high school and college credit for the course, if they complete the course with a grade of "B" or better

Lake Washington
School District

CTE Dual Credit Approval Process

- School districts identify potential high school CTE courses for articulation and submit course frameworks to Pacific NW College Credit

- Pacific NW College Credit works with college(s) to assess course outcomes and seeks approval for articulation agreement

- Qualifying courses are designated in course catalogs, and teachers inform students about how to register for CTE Dual Credit

- Students must register and pay a $46 fee (fee covers all CTE Dual Credit Courses) through the Pacific NW College Credit Consortium to be awarded college credit

Current Situation

- LWSD has approximately 40 CTE courses that offer CTE Dual Credit

- While numerous CTE courses have the opportunity for CTE Dual Credit, course offerings have not historically been intentionally "packaged" to articulate a sequence of courses/pathway that aligns with specific certificate or degree programs at community and technical colleges
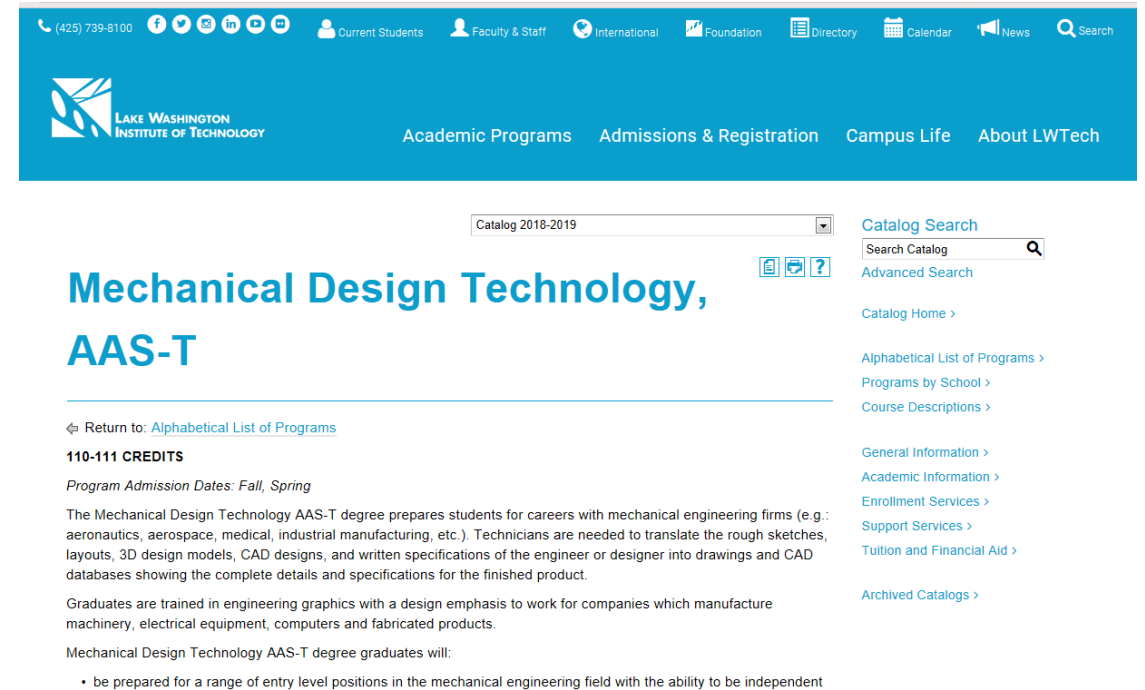
Juanita High School/LW Tech Example

Juanita High School Classes

- ☐ Architectural Drawing

- ☐ Mechanical Engineering

- ☐ Material Science Technology

Lake Washington Institute of Technology Degree Program

Catalog 2018-2019

Mechanical Design Technology, AAS-T

Return to: Alphabetical List of Programs

110-111 CREDITS

Program Admission Dates: Fall, Spring

The Mechanical Design Technology AAS-T degree prepares students for careers with mechanical engineering firms (e.g.: aeronautics, aerospace, medical, industrial manufacturing, etc.). Technicians are needed to translate the rough sketches, layouts, 3D design models, CAD designs, and written specifications of the engineer or designer into drawings and CAD databases showing the complete details and specifications for the finished product.

Graduates are trained in engineering graphics with a design emphasis to work for companies which manufacture machinery, electrical equipment, computers and fabricated products.

Mechanical Design Technology AAS-T degree graduates will:

- be prepared for a range of entry level positions in the mechanical engineering field with the ability to be independent

Catalog Search

Search Catalog

Advanced Search

Catalog Home >

Alphabetical List of Programs >

Programs by School >

Course Descriptions >

General Information >

Academic Information >

Enrollment Services >

Support Services >

Tuition and Financial Aid >

Archived Catalogs >

Juanita High School

2019 – 2020 Course Catalog

☐ Identifies STEM Career Cluster Pathway Opportunity from JHS to LW Tech

STEM Career Cluster Pathway Opportunity

The following courses are articulated with Lake Washington Institute of Technology's Mechanical Design Technology program.

By completing the following three courses with a "B" or better, students can earn up to 11 credits* toward completion of an Associate Degree in Mechanical Design Technology at Lake Washington Institute of Technology (LW Tech):

- Architectural and Engineering Tools and Techniques I
- Architectural and Engineering Tools and Techniques II/III
- Applied Materials Technology I*

*Approval pending

Applied Materials Technology I - SCO241/SCO242
2 Semesters/1.0 credit (1 semester with teacher permission) -
Grades 9, 10, 11, 12

CADR, CTE Dual Credit (pending approval)

Students earning a "B" or better in this course can pay a fee to earn 4 community/technical college credits. Articulates directly with Applied Materials Technology at LW Tech.

Prerequisite
Student must be in Algebra or higher.

Course Fees

Kamiakin Middle School STEM CTE Courses

- Automation and Robotics 1 & 2
- STEM 1 & 2
  - Design and Modeling
  - Flight Science
  - Computer Programming
  - Digital Media
  - 2D/3D Animation
  - Aerial Drone Science

Timberline CTE STEM Course Offerings

- Design & Modeling

- Green Sustainable Design

- Medical Detectives and Medicine

- Automation and Robotics

- Flight and Space

- App Creators and Game Design

CTE Program and Pathway Articulation Goals

2019 – 2020

- Continue to identify opportunities to intentionally expand CTE Dual Credit offerings to "package" a sequence of courses/pathway that aligns with and fulfills aspects specific certificate or degree programs at community and technical colleges

- Identify and communicate STEM Career Cluster Pathway opportunities at all high schools

- Organize 2020-2021 high school courses catalogs to align CTE course offerings with career clusters

- Continue to assess middle to high school STEM pathways to ensure exposure to STEM learning at the middle school level

Lake Washington School District

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Business, Community and Higher Education Partnerships

Program Advisory Committees (PAC)

Purpose: The Program Advisory Committees (PACs) provide direction and guidance to administrators and teachers for specific Career and Technical Education (CTE) programs offered by the district. PAC members includes business, industry and community professionals; district and building administrators; and CTE teachers.

Role: To advise CTE teachers on strategies to strengthen the linkage between CTE courses and programs and business and industry, ensuring that every student in Lake Washington has access to rigorous and relevant career-connected learning that prepares students for post-secondary success and access to high-skill, high-wage, and in-demand jobs.

Program Advisory Committees (PAC)

Key Responsibilities:

☐ Strengthening the relationship between business, industry, community and education

☐ Monitoring current and predicted occupational trends and identifying curriculum implications

☐ Identifying community resources to enrich CTE courses and programs

☐ Making facilities and equipment recommendations

Greater KIRKLAND CHAMBER of Commerce

WM WASTE MANAGEMENT

CORE DESIGN

CWU

SEATTLE U

CASCADE WATER ALLIANCE

the YMCA

Minuteman Press INTERNATIONAL, INC.

VERITOX

BOEING

Microsoft

King County
Natural Resources and Parks
Solid Waste Division

LAKE WASHINGTON INSTITUTE OF TECHNOLOGY
Practical. Purposeful. Promising

Magellan ARCHITECTS

Lake Washington School District

EDMONDS COMMUNITY COLLEGE

Sustainability Ambassadors
"Empower Youth to Catalyze Community Sustainability"

44

General Advisory Council (GAC)

- **Purpose:** The General Advisory Council (GAC) provides direction and guidance to administrators and teachers for the entire Career and Technical Education (CTE) program offered by the district. The GAC includes business, industry and community professionals; district and building administrators; and CTE teachers.

Dr. Paul Rossman

- 2013 – present   Associate Professor at City University & Saint Mary's University
- 2011 – 2013   Campus Dean, Strayer University, Youngstown, Ohio
- 2010 – 2011   Business & Information Systems Teaching, ITT Tech in Oregon and Washington
- 2007 – 2010   Consultant, Rossman, LLC, Redmond, WA
- 2004 – 2007   Software Consultant, Lionbridge, Bellevue, WA
- 2003 – 2007   Leadership & Economics Instructor, University of Phoenix
- 2002 – 2004   Vice President Consulting & Communications, Nimblus, Sammamish, WA
- 1977 – 2002   Engineer, Manager, & Executive, The Boeing Company, Seattle, WA

Lake Washington
School District

2018 – 2019

- Strengthen and formalize PAC/GAC structure
  - Expand PAC/GAC community/industry partner participation
  - Formalize expectations for CTE teacher participation
  - Develop PAC/GAC Handbook
  - Work with PAC/GAC to identify opportunities for authentic engagement
- Expand districtwide student events and opportunities
  - Implement Sustainability Poster Challenge tied to Earth Week
  - Implement Sammamish Chamber/YMCA opportunity
- Research models for internships and youth apprenticeships

Lake Washington
School District

Chamber Partnerships

☐ **Kirkland Chamber**

- ☐ STEM Careers Exploration Day
- ☐ Public Service Careers Exploration Day

☐ **Sammamish Chamber**

- ☐ Youth Education and Service Careers Exploration Day

Corporate Partnerships

☐ Cisco Girls Power Tech Day

- ▫ A day of learning designed to introduce girls to exciting opportunities in the information and communications technology (ICT) field

- ▫ During the event, the students are mentored by Cisco employees, hear from innovative women working in IT and engineering, and learn about educational and career opportunities in the technology field.

- ▫ Students learn about Cisco and experience transformative communication and collaboration technologies first hand, including *Telepresence,* which will connect them with other students around the world.

Insights to STEAM Career Pathways

November 18, 2018

Career and Technical Education (CTE) teachers from middle and high schools across the district came together to provide middle and high school students and families with an opportunity to:

☐ Learn about the Science, Technology, Engineering, Art and Mathematics (STEAM) CTE course offerings at our district's middle and high schools

☐ Speak with industry professionals to learn about their careers
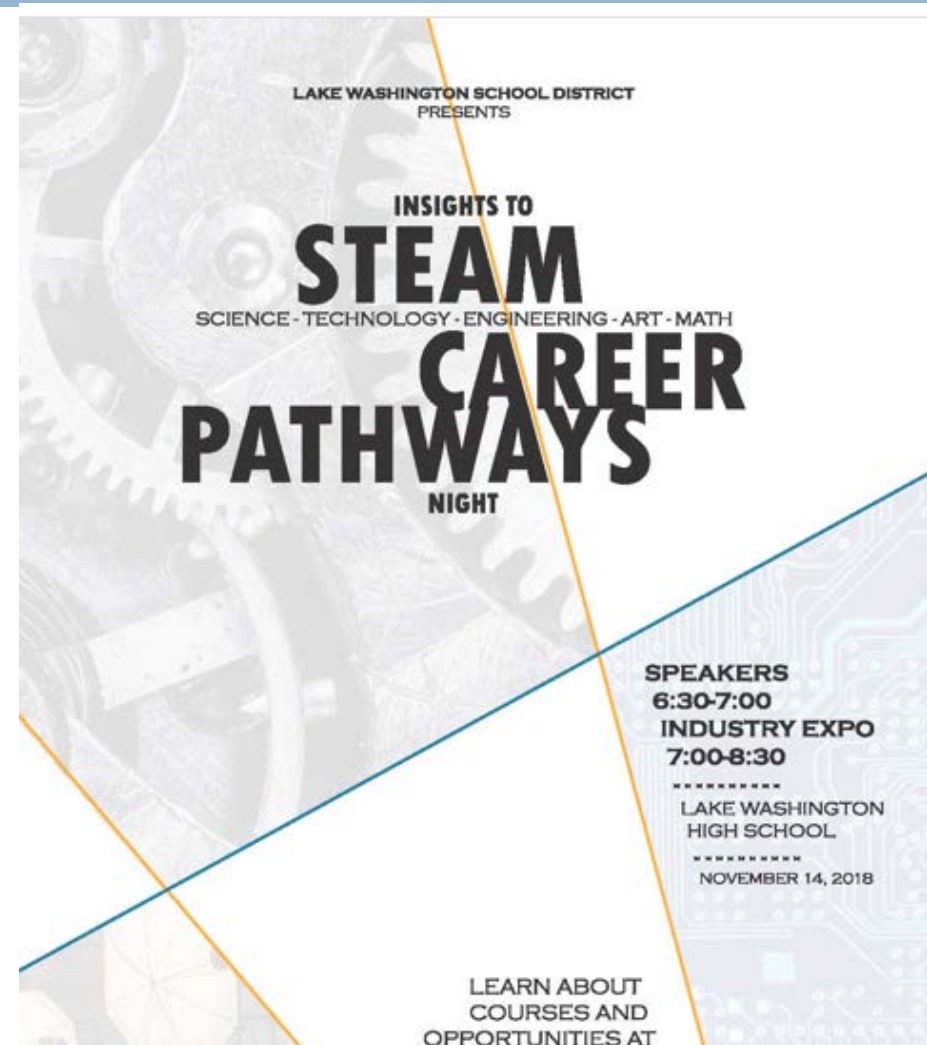
6ᵗʰ Annual Culinary Competition

January 6, 2019

- ☐ 14 high school teams
- ☐ 33 middle school teams

- ☐ Students demonstrated their culinary skills, techniques learned in their foods and culinary classes
- ☐ Students and talents and competed to make the best culinary creation

Culinary Competition Winners

John Hentges & Spencer Perry

High School Winners

Evergreen Health: Trends in Healthcare Careers

March 18, 2019

A team of LWSD teachers, principals, College and Career Specialists, and members of the College and Career Readiness department:

☐ Learned from panels of professionals at Evergreen Health (including those from areas such as Rehab, Home Health, IT, Clinical Informatics, Coding, Finance, and HR) and faculty from LW Tech's Medical Assisting program

☐ Brainstormed, discussed, collaborated and plan for how we can use what we learned to inform existing high school courses, potential new courses, and future opportunities for LWSD students

Sustainability Video and Poster Challenge

April 17, 2019

- Open to middle and high school students in CTE visual communications classes
- Challenge to create a short video or poster to highlight the importance of green sustainable practices and make a "call to action" for elementary students and elementary school Green Teams

Career and Technical Education
Arts, A/V Technology & Communications

Celebrates

Earth Week

Sustainability Video & Poster Challenge Showcase

April 17, 2019
6:00 – 7:30 p.m. *Open House*
6:30 p.m. *Awards Ceremony*
LWSD Resource Center, Board Room
16250 NE 74th St.
Redmond, WA 98052

Teen Startup Challenge

June 8, 2019

☐ **What is the LWSD Teen Startup Challenge?**
A challenge is designed to promote student startup ideas and venture creation. The challenge provides the opportunity for high school students to win prizes and learn from local business leaders. Finalists will present their ideas and business plans and receive invaluable feedback from successful professionals.

☐ **Who can participate?**
The challenge is open to high school students in Lake Washington School District.

☐ **What are the prizes?**
The winning student/team will be featured at Investor Sharks Northwest, will receive feedback and advice from some of the biggest venture capitalists and angel investors in the Puget Sound Region, and will be awarded $2500 in prize money from the Kirkland Chamber of Commerce!

Thank you to our wonderful sponsors and judges!

Business, Community and Higher Education Partnerships

<u>2019 – 2020</u>

- ☐ Continue to strengthen and expand PAC/GAC Structure
  - ◻ Continue work with PAC/GAC to identify opportunities for authentic engagement
- ☐ Continue to expand districtwide student events and opportunities
- ☐ Begin to implement models for internships and youth apprenticeships

Lake Washington
School District