SHSM Program Planning Template

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School Name	Ernestown Secondary School	
Sector	**Information and Communications Technology**	
Existing SHSMs at the School	Arts and Culture, Construction and Energy	

SHSM Program Description:

The **ICT SHSM** program offered at Ernestown Secondary School **provides students in grades 11 and 12 with learning opportunities related to the dynamic and expanding information technology economic sector**. In addition to the secondary school technology courses available to them, **ICT SHSM students are funded to pursue certificate courses** (ex. in-person health and safety training, short on-line technology courses), **experiential learning activities** (ex. technology-related workshops/tutorials), **reach ahead experiences** (ex. post-secondary institution visits), and **technology sector experiences** (ex. Technology company visits). If students undertaking the ICT SHSM complete all the program requirements by the time of their Grade 12 graduation, they will earn a special seal on their Ontario Secondary School Diploma (OSSD) indicating this achievement.

The **ICT SHSM program at Ernestown emphasizes learning about the creative use of computers** through the study of a wide variety of topics including: **web application development, 3D modelling, 3D printing, electronics, robotics, and video game/virtual reality creation**. At Ernestown, each ICT SHSM student has access to an advanced lab containing dual-monitor gaming workstations running professional design software such as Unity3D (unity.com) and Blender (blender.org). The lab is also home to new and emerging technologies such as a pair of Cubicon Style 3D Printers, a wide array of electronics such as micro: bit and associated electronics and a class set of Oculus Quest virtual reality headsets!

Website: https://sites.google.com/limestone.on.ca/shsm/home/information-and-communication-tech

SHSM Team

	Name	Responsibilities (specific tasks)
Student Success teacher	Melissa Brooks	Monitor credit accumulation / provide academic support
School administrator(s)	Angela Salmond & Chris Morrow	Overseeing all aspects of SHSM
Guidance teacher(s)	Katherine English & Erin Stinson	SHSM credit accumulation, certification tracking, promotion and registration of SHSM students and tracking of SHSM budget
Cooperative education teacher(s)	Mike Zanibbi	Coop setup
Major credit teacher(s)	Tom Pinkerton	Delivery of major credits
Teachers of 'other required' course(s)	ESS teachers (in English, Arts and Science Departments)	Delivery of 'other credits' and implementation of CLA's (where applicable)

SHSM Program Models:

X	*First Semester Model*	☐ 2 Major credits ☐ 1 Elective Credit ☐ Minimum 1 Coop ☐ 3 Elective Certifications ☐ 1 Reach Ahead or SPE ☐ Remaining Major credits are offered at any LDSB Secondary School

*SHSM programing is for students from all pathways.

This SHSM Program provides opportunities for the following potential occupations:
The program is designed to help students make good choices about potential post-secondary programs of study and careers in information and communications technology. Graduates of this program are currently attending St. Lawrence College, Algonquin College, Queen's University and the University of Western Ontario pursuing postsecondary programs in computing, engineering and video game development. Some potential occupations would include: Computer Engineer, Computer Programmer, Computer Technician, Video Game Developer and Web Developer.

Pathway Chart: Below are the course codes that are linked to the sector and are offered at this school.

Most common course courses linked to the program

SHSM Major Subjects							
Apprenticeship		*College*		*University*		*Workplace*	
11	**12**	**11**	**12**	**11**	**12**	**11**	**12**
ICS3C	ICS4C	ICS3C	ICS4C	ICS3U	ICS4U	TEJ3E	TEJ4E
TEJ3M	TEJ4M	TEJ3M	TEJ4M	TEJ3M	TEJ4M	TGJ30	TGJ40
TGJ3M	TGJ4M	TGJ3M	TGJ4M	TGJ3M	TGJ4M	TDJ30	TDJ40
TDJ3M	TDJ4M	TDJ3M	TDJ4M	TDJ3M	TDJ4M		
English							
Apprenticeship		*College*		*University*		*Workplace*	
11	**12**	**11**	**12**	**11**	**12**	**11**	**12**
NBE3C	ENG4C	NBE3C	ENG4C	NBE3U	ENG4U	ENG3E	ENG4E
ENG3E	OLC40		OLC40		OLC40		OLC40
Math							
Apprenticeship		*College*		*University*		*Workplace*	
11	**12**	**11**	**12**	**11**	**12**	**11**	**12**
MBF3C	MAP4C	MBF3C	MAP4C	MCF3M	MCV4U	MEL3E	MEL4E
MCF3M	MCT4C	MCF3M	MCT4C	MCR3U	MDM4U		
MEL3E	MEL4E				MHF4U		
Other Required Credits (refer to Ontario.ca/SHSM)							
Apprenticeship		*College*		*University*		*Workplace*	
11	**12**	**11**	**12**	**11**	**12**	**11**	**12**
ADA30/M	ADA4M	ADA3M	ADA4M	AVI3M	AVI4M	ADA30	AVI4E
AMG3M	AMG4M	AMG3M	AVI4M	SBI3U	SBI4U	AVI30	
AVI3O/M	AMU4M	AVI3M	SCH4C	SCH3U	SCH4U	AWQ30	
AWQ30	AVI4E/M	SCI3C	SPH4C	SPH3U	SPH4U	SVN3E	

Compulsory Certifications:

Each sector has a certain number of compulsory certifications. Please refer to the LDSB SHSM website for more information: https://sites.google.com/limestone.on.ca/shsm/home

Compulsory Certification	
Title/Focus of Certification or Training Program:	First Aid
Provided by: (range of providers)	St. John's Ambulance
Delivery Type (in person/blended/online):	In person Online (through LDSB SHSM website)

Compulsory Certification	
Title/Focus of Certification or Training Program:	CPR
Provided by: (range of providers)	St. John's Ambulance
Delivery Type (in person/blended/online):	In person Online (through LDSB SHSM website)

Compulsory Certification	
Title/Focus of Certification or Training Program:	WHMIS
Provided by: (range of providers)	Safety Guys
Delivery Type (in person/blended/online):	In person Online (through LDSB SHSM website)

Elective Certifications:

Each sector has a certain number of elective certifications. Please refer to the LDSB SHSM website for more information: https://sites.google.com/limestone.on.ca/shsm/home

Elective Certification	
Title/Focus of Certification or Training Program:	Basic Health and Safety
Provided by: (range of providers)	Mike Zanibbi
Delivery Type (in person/blended/online)	In person On-line (through the LDSB SHSM website)

Elective Certification	
Title/Focus of Certification or Training Program:	Digital Marketing Certification – Master Digital Marketing
Provided by: (range of providers)	Udemy, Inc.
Delivery Type (in person/blended/online)	Online
Advanced training in a technique/technology is listed as an elective certificate option on the Ministry of Education SHSM site (http://www.edu.gov.on.ca/morestudentsuccess/sector/information.html). This certificate teaches students about many different techniques/technologies to market in the digital realm. Knowledge of the many ways to market online relates to the creative use of computers focus of the SHSM.	

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Elective Certification	
Title/Focus of Certification or Training Program:	Complete C# Unity Game Developer 3D
Provided by: (range of providers)	Udemy, Inc.
Delivery Type (in person/blended/online)	Online
This elective certificate allows students to learn about sector specific software. Students earn this certificate by completing an online course in which they learn to code games using Unity software which is widely used by professional video game development studios. This certificate relates to the creative use of computers focus of the SHSM.	

Elective Certification	
Title/Focus of Certification or Training Program:	Project Management
Provided by: (range of providers)	The Beanstalk Project
Delivery Type (in person/blended/online)	Online
Project management is listed as an elective certificate option on the Ministry of Education SHSM site (http://www.edu.gov.on.ca/morestudentsuccess /sector/information.html). This certificate relates generally to the creative use of computers focus of the SHSM but more specifically to the skills required to effectively carry out any project.	

Elective Certification	
Title/Focus of Certification or Training Program:	VR Development Fundamentals with Oculus Quest/2 and Unity
Provided by: (range of providers)	Udemy, Inc.
Delivery Type (in person/blended/online)	Online
This elective certificate allows students to learn about sector specific software and hardware. Students earn this certificate by completing an online course in which they learn to code virtual reality games/experiences using Unity software and Oculus Quest hardware which is widely used by professional video game development studios. This certificate relates to the creative use of computers focus of the SHSM.	

SHSM Students

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How do SHSM students be selected/identified for the program? Select all that apply.	
Interview	X
Application	X
Self-identify through course selection	X
Parent approval required	X
myBlueprint (new this year)	X
Other _____ (add more details here)	☐