Opportunities for Montana Students to Learn Coding
CSCI 100 - CodeMontana: Intro to Computer Science (Dual Credit)

All Montana students can take the class for free. Students only pay a fee if they want the college credit.

Montana Tech in Butte offers a 3 college credit class that uses the CodeHS.com curriculum to teach fundamental computer science and coding concepts. This course teaches problem solving and logical thinking skills while using Python.

For $148.74 a student can earn 3 college credits from Highlands College of Montana Tech that are transferrable to any in-state college. The student would have to check with the college they plan to attend for transferring the credit to an out of state institution.

Right now only juniors and seniors are allowed to get college credit, but our high school has had kids take it as sophomores and then apply for the credit the following year.

Sweet Grass County High School offers students dual credit through our differentiated curriculum program. Anyone can take it for high school credit through independent study. Students are supervised by our guidance counselor/PIL director. Students can just earn high school credit if they choose or cannot afford the $148.74 for the college credits.

Have students go to the following link to sign up: http://codemt.org/

If a student is planning to attend Montana Tech go to this link for information on a $4000 scholarship for students that complete this course: Montana Tech Scholarship:

Contact information:
Brian Koontz: bkoontz@mtech.edu
College credit information: bphelps@mtech.edu
For information from a school that has students enrolled in this contact Mindy Obert:
obertm@sgchs.com

Big Sky Code Academy

**From Deanna Flemmer (Corvallis Schools)

The Big Sky Code Academy is a Missoula based nonprofit that offers technology education / coding training programs statewide. We have three categories of trainings:

1) **K-12 Teacher Professional Development**: Our Montana Teachers Teaching Tech (aka **MT³**) initiative was launched in partnership with Code.org who recently selected the Big Sky Code Academy as their Regional Partner for Montana. We are tasked with providing professional development opportunities for public school teachers in Montana so they can bring computer science into the classroom. These PD opportunities are offered at **no cost** from us or Code.org to teachers, schools and school districts. I have attached a PDF for you that outlines these courses and more information can be found here: http://www.bigskycodeacademy.org/programs/mtcubed/

2) **After-school coding classes/clubs for kids** – This past September, we launched a statewide expansion of our Montana Code Girls program for middle and high school girls (9 – 18 years old). This is a **FREE** after-school program that is supported by volunteers in the community (no coding experience required). We have over 100 registered from Missoula to Billings, Kalispell, Whitefish, Big Fork, Malta, and more! We also offer an online class for those girls that don't have volunteers in their community to teach them. This program will go co-ed and become **Montana Code Kids** starting in June. We will be offering paid summer camp options as well as continuing our **FREE** after school option during the academic year. Current Website: www.mtcodegirls.org. New Website (currently an interest form): www.mtcodekids.org will launch in June 2017.

3) **Adult coding boot camps** - We offer full time and part time boot camp training in web development (classes are held in cities across the state and we're expanding as quickly as we can) for 18+. The goal of this program is to get adults into the technology / web development sector. These are paid classes. More information can be found here: www.bigskycodeacademy.org

Contact Info:
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Website: www.bigskycodeacademy.org

Montana Digital Academy Programming Courses

Coding for Web Design (formerly Web Design)
Joy and Beauty of Computing (**dual credit** available through Helena College)
AP Computer Science

Contact Info: jason.neiffer@montanadigitalacademy.org
Website: montanadigitalacademy.org

Loyola Sacred Heart Programming Courses
(**submitted by Garth Flint)

CSCI 100 - Python UM offers dual college credit - taught by Garth
CSCI 135 - Java UM offers dual college credit - taught by Garth
codecademy.com offers a free course in Python. Not recommend. It is tedious and has errors.
For independent study or classroom I use this free book
http://greenteapress.com/thinkpython/html/index.html - free book used for independent study or classroom.
There is a free Java greenteapress book also, but has not been used.
(https://en.wikibooks.org/wiki/A_Beginner%27s_Python_Tutorial)
Greenfoot.org for Java.

Loyola Sacred Heart offers a student 4 years of CS/Programming at Loyola.

Year 1 Sem 1 - typically Scratch/Small Basic/Visual Basic
Year 1 Sem 2 - Computer tech - hardware stuff
Year 2 - Intro to Game Programming - Gamemaker/Unity/Javascript/C#/Blender - Use on-line tutorials and Youtube
Year 3 - CSCI 100 - Python - Dual credit
Year 4 - CSCI 135 - Java - Dual credit

The only reason Python is a Junior course is the dual credit has a minimum age and class year stipulation.

Free Stuff Hand-out for teaching programming in high school:
https://docs.google.com/document/d/1YdsSN84HSkim3z27s5nygdJv-4BPCX60eMx5cQgHwWY/edit?usp=sharing

Contact Info: Garth Flint, gflint@mcsmt.org

Great Falls Public Schools Programming Courses

Great Falls Public Schools has formal offerings in both high schools. Informal coding is taught as a unit in middle school as well.

Contact Info: Stacy Dolderer: stacy_dolderer@gfps.k12.mt.us

K-8 Coding

Three Forks

code.org grades 2nd, 4th, 5th, and 7th grade students.
Dash & Dot robots grade 3
Hello Ruby storybook coding program grade1

Contact Info: Katie Emery, kemery@threeforks.k12.mt.us

Big Timber Grade School

Code.org grades 4th-6th
 Code Combat grade 7
Code.org grade 8 and have them create their own app.

STEM club that offers additional coding opportunities
Lego League (1st-4th & 5th-8th) with Lego Robotics kits.

Contact Info: Cindy Glavin, cglavin@bigtimber-gs.k12.mt.us

K-12 Coding Resources

Resource for hour of code that outlines various coding apps and resources:
https://docs.google.com/spreadsheets/d/1PkJLnCPnaM9pH5BrJtmGMZ8v-yWWC9f_jXbShDXNE1g

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