B

The information in this document is provided to help you in your cluster selection. We expect that you are interested in learning (more) about coding and its applications, and we have several clusters that relate to this exciting field. While some clusters expect some prior coding background, others are open to absolute beginners. No matter what your prior experience level is, it is important that you select a cluster where you will be challenged in terms of acquiring new coding skills, while also appropriately building on top of what you already know. We hope that you will find all the cluster topics below interesting (we believe they are), and would encourage you to select a topic that you are not only curious about but also fits with your goals in terms of coding skills.

It is important for your success and the success of your classmates that you apply to clusters suited to your background. If you haven't programmed before, don't apply to clusters that require programming experience. Likewise, if you have extensive experience programming, don't apply to clusters that are geared toward students without a programming background.

C

Computers in Everyd y ife

Prerequisite Courses or equiv lent

Algebra II or Integrated Math II

Expected Incoming Underst nding of Computing

No prior programming experience or at most a few lessons on programming in class

Cluster Timeline

Students will be formally taught basic programming for the first 2 weeks and then transition into programming in new environments.

C

R US Robots for Underse Science

Prerequisite Courses or equiv lent

Algebra II or Integrated Math II
Programming experience highly desirable

Expected Incoming Underst nding of Computing

Highly desirable - basic programming experience in Python or C/C++

Cluster Timeline

Students will use CBT/e-book for introduction to embedded Linux and Python. Students will get lectures and hands-on labs on Embedded Linux and Python during the first two weeks.