

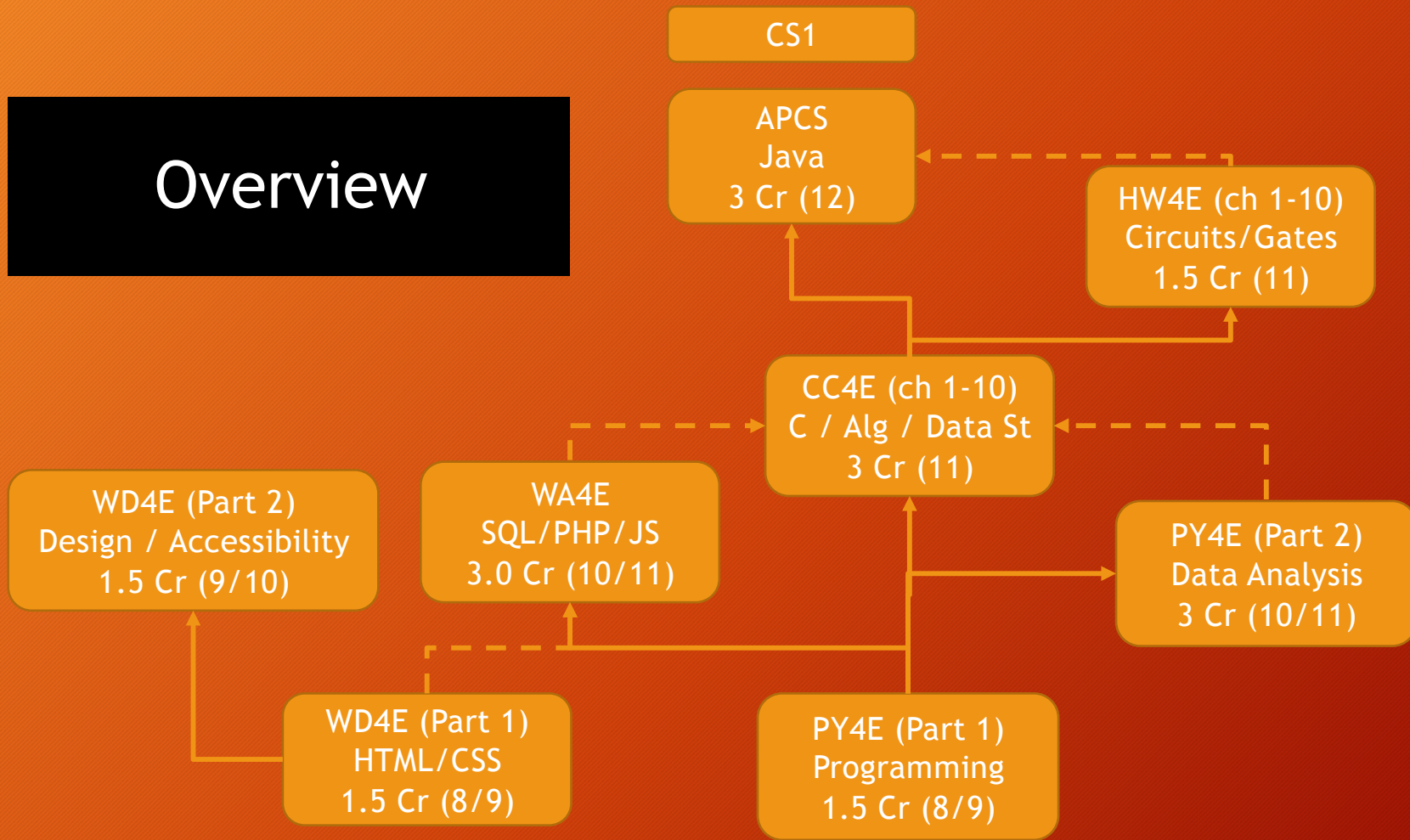
# High School Curriculum

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# Goals

- Build a curriculum path between Scratch and APCS / CS1
- Build a curriculum path that prepares High School students for "technology required" careers right out of High School
  - From Scratch to a Web Developer
  - From Scratch to Data Analysis

# Overview



Scratch/MindStorms/etc... 6/7/8



# Courses

- Python for Everybody (Part 1) 1.5 Credits
  - Programming, Loops, Variables, Lists, Dictionaries
- Python for Everybody (Part 2) 1.5 credits
  - APIs, Web Scraping, Databases, Vizualization
  - [www.py4e.com](http://www.py4e.com) / Python For Everybody Specialization (Coursera)
- Web Design for Everybody (Part 1) 1.5 Credits
  - HTML / CSS
- Web Design for Everybody (Part 2) 1.5 Credits
  - Look and Feel / Accessibility
  - Web Design for Everybody Specialization (Coursera)

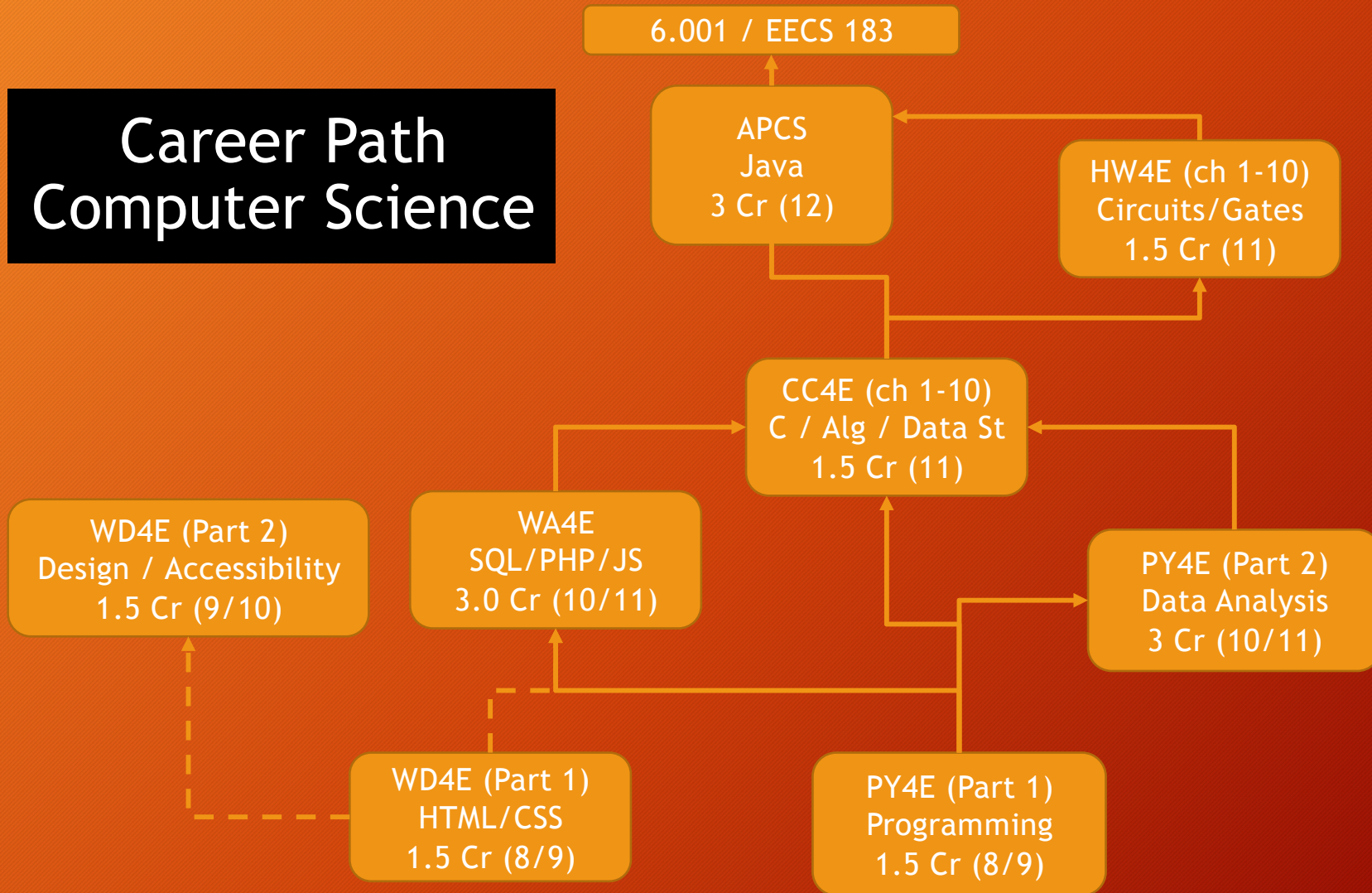
"3 credits" = one semester in college and ½ year in high school

# Courses

- Web Applications for Everybody - 3 Credits
  - SQL/PHP/HTTP/JavaScript/JQuery
  - [www.wa4e.org](http://www.wa4e.org) / Web Applications for Everybody Specialization (3Q17)
- C Programming for Everyone - 3 Credits
  - Variables, iterations, structures, pointers, dynamic memory, implement Python list / dict / sort
  - Not started
- Hardware for Everybody - 1.5 Credits
  - Transistors, Gates, Flip-Flop, Add with Carry, Machine Language, Assembly Language
  - Not started

"3 credits" = one semester in college and 1 year in high school

# Career Path Computer Science





# Career Path Data Analysis

R  
Bootcamp

Data  
Bootcamp

...

Redshift  
Bootcamp

WA4E  
SQL/PHP/JS  
3.0 Cr (10/11)

PY4E (Part 2)  
Data Analysis  
3 Cr (10/11)

PY4E (Part 1)  
Programming  
1.5 Cr (8/9)

# Career Path Web Applications

React  
Bootcamp

Rails  
Bootcamp

...

Django  
Bootcamp

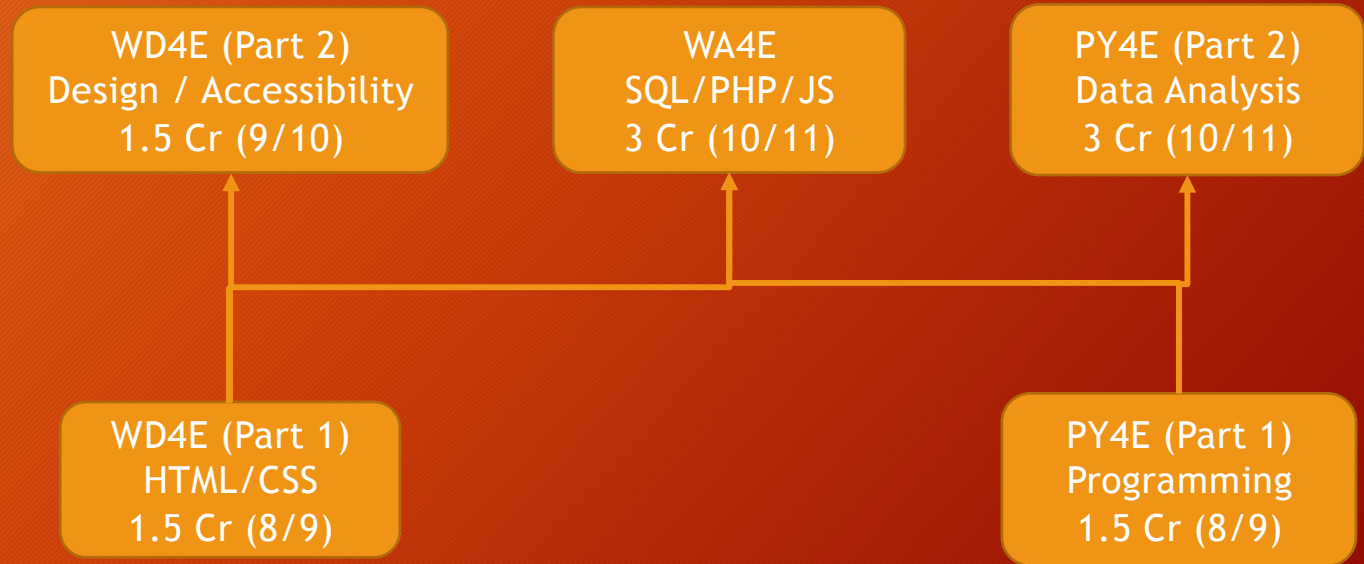
WD4E (Part 2)  
Design / Accessibility  
1.5 Cr (9/10)

WA4E  
SQL/PHP/JS  
3 Cr (10/11)

PY4E (Part 2)  
Data Analysis  
3 Cr (10/11)

WD4E (Part 1)  
HTML/CSS  
1.5 Cr (8/9)

PY4E (Part 1)  
Programming  
1.5 Cr (8/9)





# Summary

- Fill the gap between Scratch and APCS
- Provide non CS career paths