HPC Training at EPCC (including ARCHER2)

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Reusing this material

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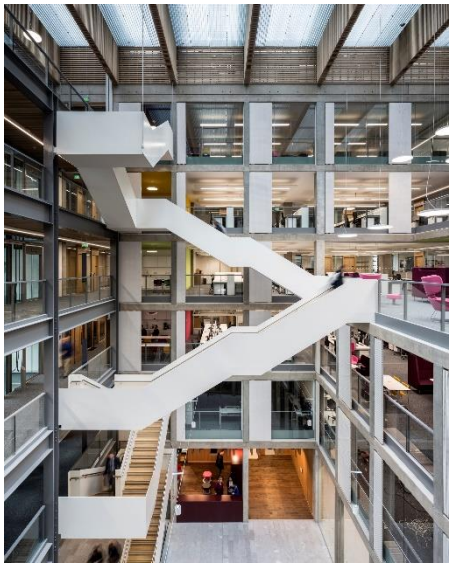
EPCC

- Founded in 1990 as Edinburgh Parallel Computing Centre
  - A Centre in The University of Edinburgh, Scotland, UK
  - self-funded with over 100 full-time staff
  - relocated to the Bayes Centre in 2018



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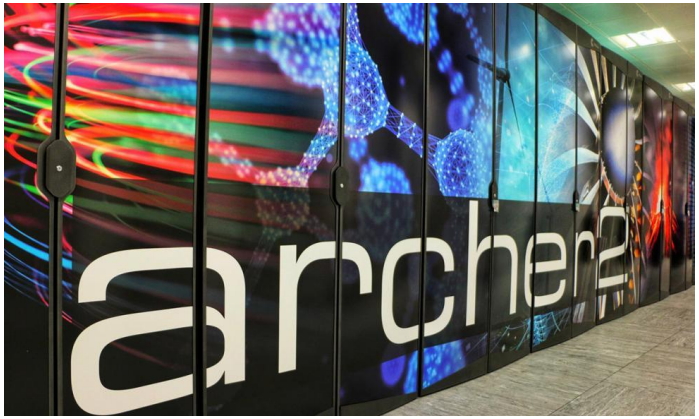
Activities

- Projects in HPC, Data Science & Software Development
  - supporting UK academic research
  - industrial partners
  - European funding
- National Supercomputing services
  - ARCHER2 and Cirrus
- Education and Training
  - Postgraduate Masters Programmes in HPC
  - HPC training courses for national services



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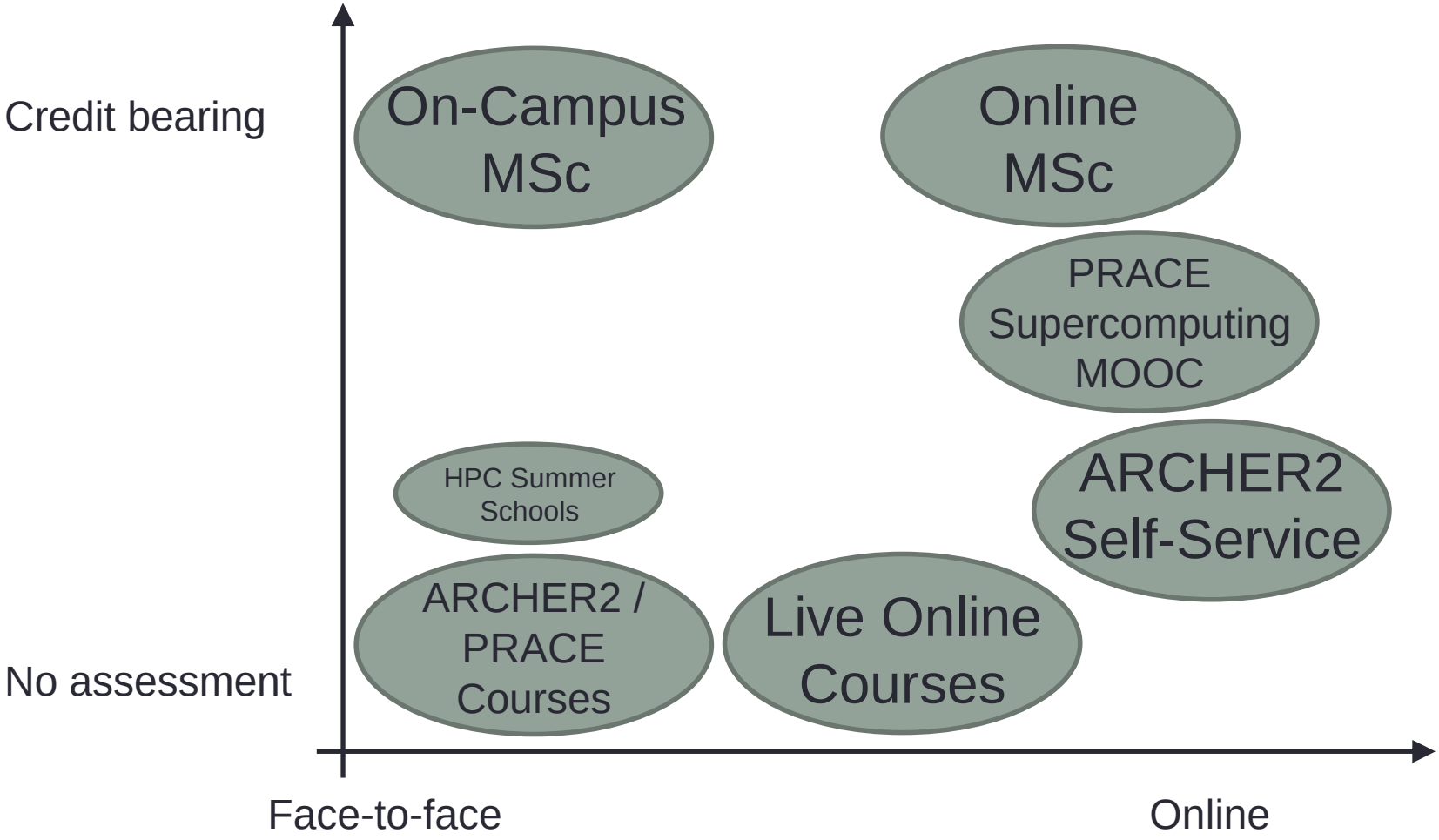
EPCC Ecosystem (non-COVID)



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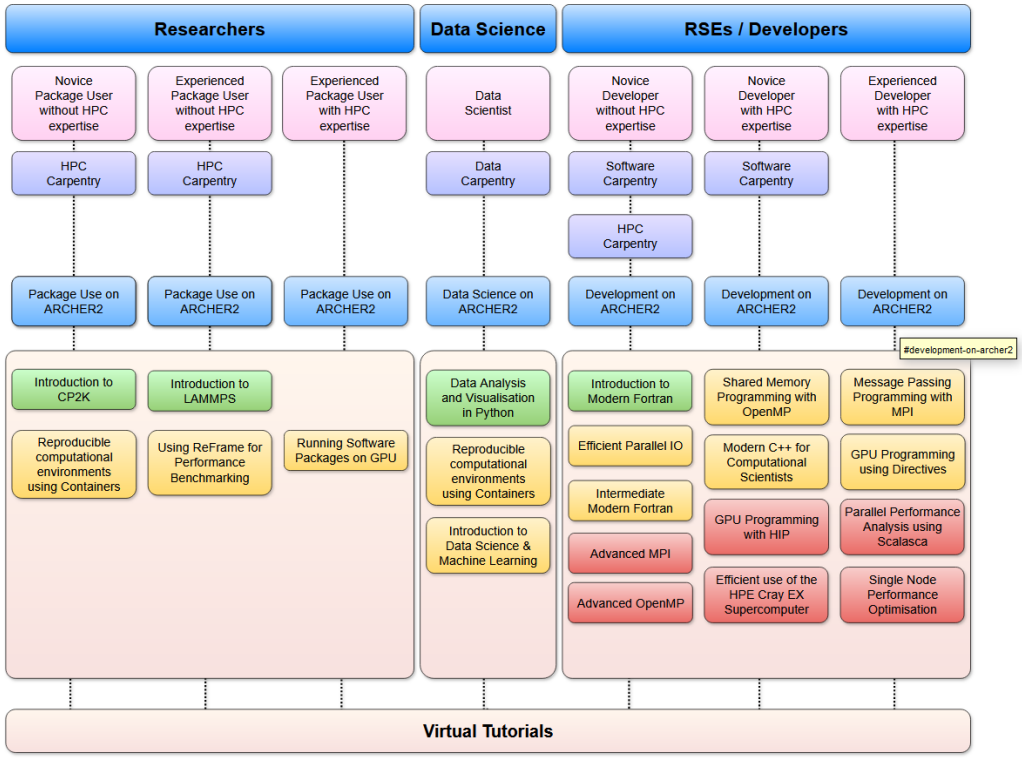
https://www.archer2.ac.uk/training/courses/



Some example scenarios and suggested training paths.

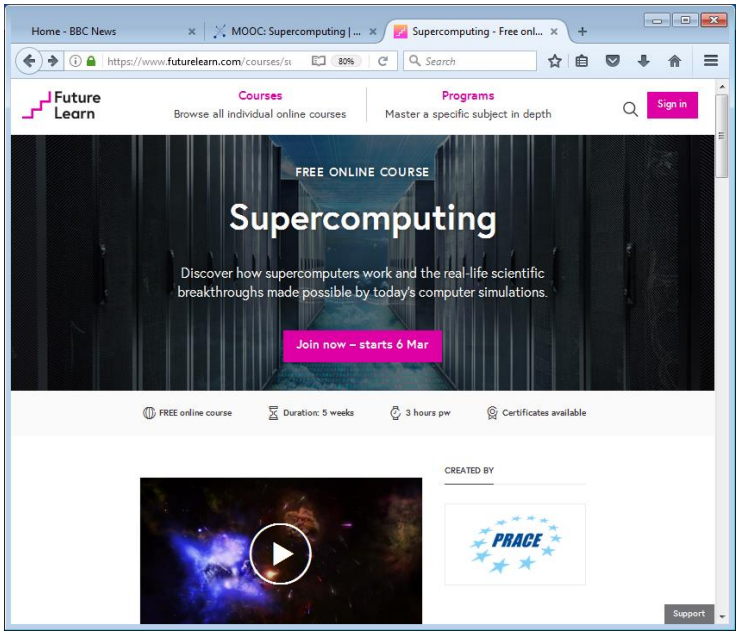
Outline Course Descriptions

Introductory (level 1) courses

- Data Carpentry
- HPC Carpentry
- Software Carpentry
- Package Use on ARCHER2
- Introduction to CP2K
- Introduction to LAMMPS

futurelearn.com/courses/supercomputing/

- Free introductory course
  - videos, articles, quizzes, discussion boards etc.
  - certificate upon completion of multiple-choice test (+fee!)
  - largely conceptual
  - tutors contribute to discussions
  - “ask an expert” sessions



- Five runs from 2017 - 2019
  - typically around 3000 “joiners”
  - typically around 300 “completers”

- Still running in “unfacilitated” mode

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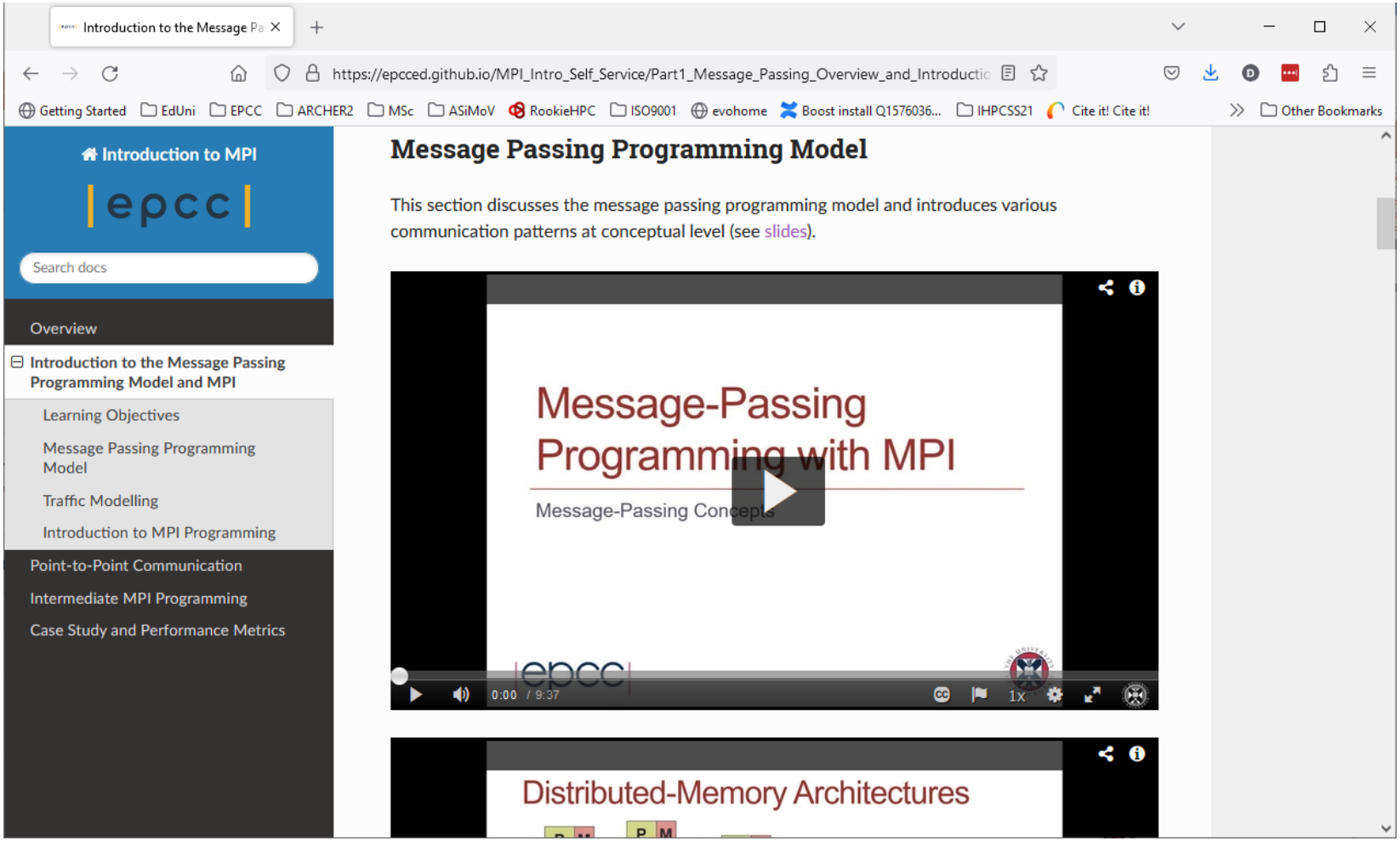
ARCHER2 Self-Service Courses



Conclusions

- ARCHER2 training available face-to-face and online (synchronous delivery or asynchronous self-service)
- Wide range of material covering a diverse user community
- We see high demand for introductory / fundamental courses
  - Carpentries
  - programming
  - data science
- as well as for emerging areas
  - GPUs