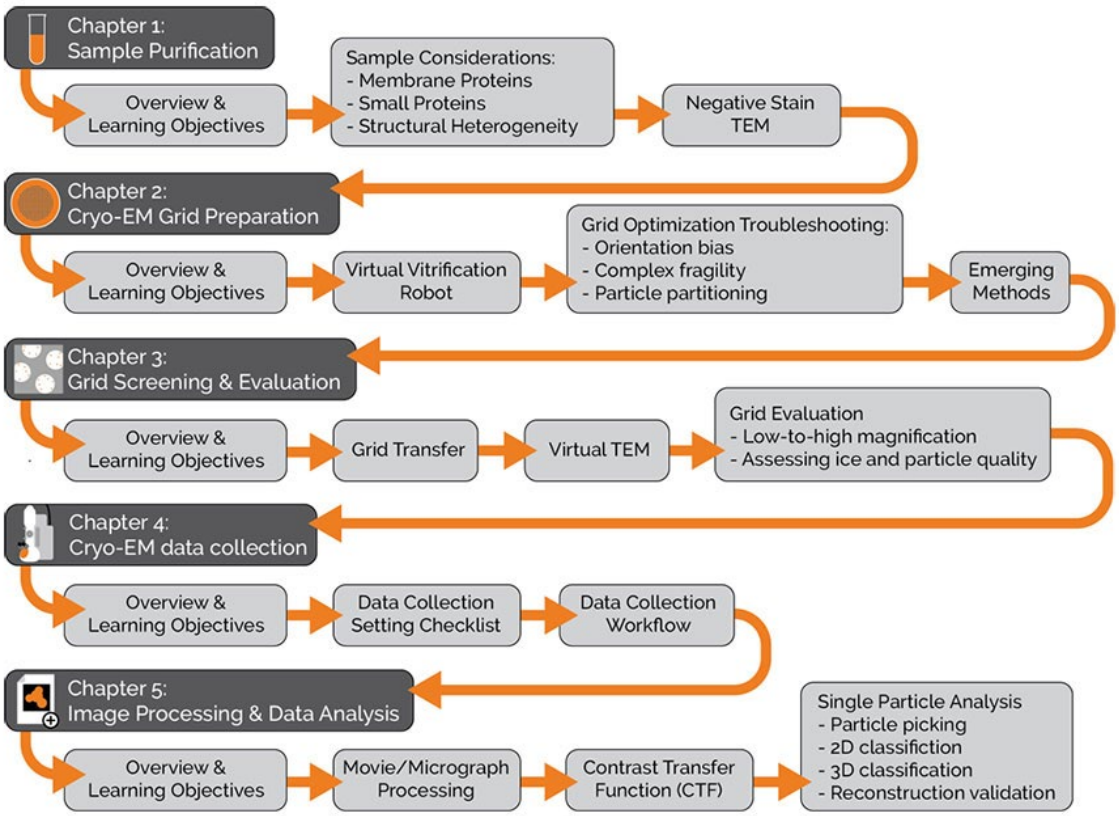
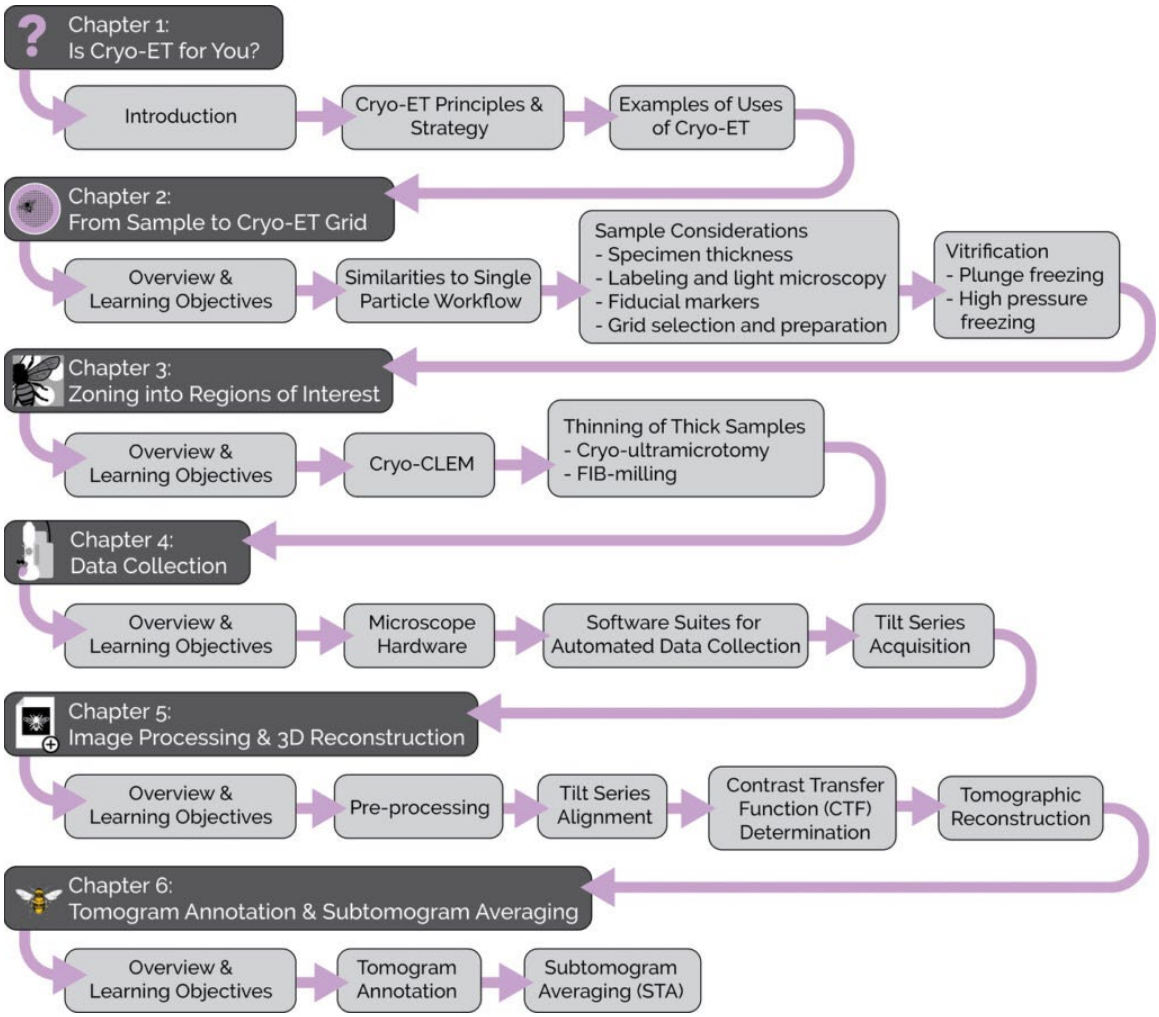
CryoEM 101: Beginner Training Guide

CryoEM-101, a free online course, introduces newcomers to cryo-EM and cryo-ET workflows, covering sample and grid preparation, data collection, and processing. It features animations, interactive elements, and practical videos on methods like plunge freezing and sample insertion, and data collection. Image galleries show real TEM imaging outcomes. This course accelerates learning and allows center staff to focus on hands-on training rather than basic concepts.

CryoEM 101, led by Drs. Peter Shen, Janet Iwasa, and Julia Brasch at the University of Utah can be accessed here: https://cryoem101.org/



Flow chart outlining the standard single-particle CryoEM workflow covered in CryoEM 101



Cryo-Electron Tomography (CryoET) workflow covered in CryoEM 101

Other Resources

Resource Description	Link
Online curriculum by Prof. Grant Jensen covering cryo-EM theory and practice	https://cryo-em-course.caltech.edu/
Thermo Fisher's Cryo-EM Learning Center with structured content and webinars	CryoEM Learning Center
Thermo Fisher's dedicated Cryo-ET resources page	Cryo-ET Resources
CryoEDU's self-paced cloud-based training for cryoEM/ET data analysis	https://cryoedu.org/
Yale's Principles of Cryo-EM course on mathematical foundations and image processing	https://cryoemprinciples.yale.edu/
MRC-LMB's CryoEM course for scientific training in electron microscopy	Scientific Training-EM
YouTube playlist of SerialEM instructional videos	SerialEM Playlist