Professional Master’s Degree Program in Power Electronics
University of Colorado—Boulder

Frequently Asked Questions and Answers

What is the program?
It is a Professional Master’s degree program offered by CU-Boulder’s Department of Electrical, Computer, and Energy Engineering (ECEE) and Colorado Power Electronics Center (CoPEC) in the College of Engineering and Applied Science. It leads to a Master of Science degree in Electrical Engineering (M.S.E.E). Its goal is to produce creative, workforce-ready graduates equipped with versatile power electronics skills and technical leadership abilities.

What are the prerequisites for applicants?
A Bachelor of Science degree in Electrical Engineering, Electrical and Computer Engineering, or equivalent, is required. The curriculum assumes a solid background in circuits, electronics, and related subject matter.

Is the GRE required for admission?
Yes, a Graduate Record Exam is required for admission to our MS Degree. For those pursuing admission to our Graduate School to obtain a Master’s degree, please refer to details of the application process and requirements here.

What is the tuition cost?
For graduate students, Professional Master’s tuition rates are differentiated from traditional academic research tuition rates. The PM rates are linear per student credit hour and have low differential for non-residents as compared with traditional rates. Please refer to the officially published tuition rate schedules from the campus Bursar’s office. Non-degree student tuition rates for power electronics professional master’s courses will generally follow the same rates as for graduate students. Tuition rates are administered through the respective enrollment processes for degree and non-degree students. Graduate students may be enrolled in only one Professional Master’s program at a time.

What is the difference between this degree and the traditional M.S. degree?
This degree requires specialization in power electronics, to develop a foundation for a career in the power electronics field. Upon graduation, the transcript will indicate completion of the sub-plan in power electronics.

How and when do I apply?
Complete details on the application process (admission requirements, application deadlines, how to apply instructions for both VISA and domestic students) may be found under the Prospective Students section of our ECEE department website.
Is there a Graduate Advisor for this program?
Yes. For further inquiries or assistance, please contact our ECEE Graduate Advisor, Adam Sadoff, adam.sadoff@colorado.edu, (303) 735-0490.

Are there any TA, RA, GA, or GPTI opportunities in the professional master's program?
Students enrolled in Professional Master’s programs are eligible for an hourly-paid appointment or for a program-administered fellowship, but are not eligible for TA, RA, GA, or GPTI roles that include tuition waivers. Instead, professional master's program tuition rates are offered to all enrolled students at substantially lower rates than our other M.S., M.E., and Ph.D. degrees.

What are the degree requirements?
30 credit hours of graduate-level coursework are required. Three core courses in power electronics are required: ECEN5797, ECEN5807, and ECEN5817. Two laboratory courses in power electronics are also required. A minimum of one additional elective course related to power electronics is required. Of the remaining four courses, at least three must be approved technical electives.

What is the expected timeline for completing the Professional Master’s degree?
This program offers great flexibility. Full-time students typically complete the degree in two years or less, taking 2-3 courses per semester. Part-time students should complete the degree within five years.

Does the program include research or thesis?
No research or thesis components are required. The primary objective of this program is workforce preparation in industry-driven highly employable engineering skills. The program offers a curriculum directed towards up-to-date theory and skills required for engineers practicing power electronics. Graduate design laboratories are also offered.

Participants who desire a research-driven experience may optionally enroll in independent study or thesis credits.

Will the professional master's program limit my options for a Ph.D. afterwards?
No. This program concentrates on preparing students for an industry career; however, enrolled students may apply for admission to the Ph.D. program if they so choose.

Can I earn the Professional Master's degree in power electronics online?
Yes. With the exception of the laboratory courses, all course offerings in this program are available through CU Boulder Connect. Students admitted into this Professional Master’s program can enroll in the online version of these courses and earn the M.S. degree without attending the campus.

Non-degree students, for example those in industry pursuing a Professional Certificate in Power Electronics, may also enroll in courses through the Division of Continuing Education (conted.colorado.edu or 303-492-5148). The process begins here. Our Continuing Education division works closely with CU Boulder Connect, which is our overarching division for distance learning. BBA focuses on distance, degree-seeking students, while Continuing Education handles non-degree students.

Refer to the campus Academic Calendar for important deadline dates.

Does the program exist under a designated STEM degree?
Yes. Since the ECEE Department offers the professional master’s program under the MS degree, the CIP code is 14.1001 with a CIP description of electrical and electronics engineering. This CIP code is listed on ICE website as a STEM-designated degree program, http://www.ice.gov/sites/default/files/documents/Document/2016/stem-list.pdf.