THE UNIVERSITY OF HONG KONG
FACULTY OF ENGINEERING

Program Learning Outcomes of the proposed new Minor in Aerospace Engineering

Proposed Program Learning Outcomes (PLOs)	University Educational Aims (UEAs)
PLO1: To equip students with comprehensive foundational knowledge across key disciplines of aerospace engineering, fostering interdisciplinary understanding through diverse coursework that prepares them for advanced study and professional practice.	**UEA1:** Pursuit of academic / professional excellence, critical intellectual inquiry and life-long learning
PLO2: To convey the importance of aerospace engineering in the pursuit of scholarship	**UEA2:** Tackling novel situations and ill-defined problems
PLO3: To engage in practical projects which are related to the important current developments in the aerospace engineering fields	**UEA3:** Critical self-reflection, greater understanding of others, and upholding personal and professional ethics **UEA4:** Intercultural communication, and global citizenship
PLO4: To deliver a high-quality, rigorous curriculum that emphasizes core principles of aerospace engineering, ensuring students acquire the essential technical skills and theoretical knowledge aligned with international standards.	**UEA4:** Intercultural communication, and global citizenship **UEA6:** Leadership and advocacy for the improvement of the human condition
PLO5: To cultivate engineers with broad technical expertise in aerospace systems, a readiness to adopt and adapt to cutting-edge technologies, and a strong commitment to professional ethics and standards recognized by relevant professional bodies.	**UEA5:** Communication and collaboration **UEA6:** Leadership and advocacy for the improvement of the human condition
PLO6: To develop students' capabilities in practical problem-solving and innovative design by integrating analysis, experimentation, software tools, and collaborative teamwork, enabling them to address real-world aerospace challenges creatively and effectively.	**UEA4:** Intercultural communication, and global citizenship **UEA6:** Leadership and advocacy for the improvement of the human condition

Mapping between Course Learning Outcomes and Program Learning Outcomes

To further elucidate the information on learning outcomes, a mapping table between Course Learning Outcomes and Program Learning Outcomes is constructed.

Course in Minor in Aerospace Engineering	**Alignment with the Programme Learning Outcome (PLOs)**					
	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6
Introductory courses Breadth requirement						
MECH2413 Engineering mechanics	√	√			√	√
MECH3402 Engineering thermodynamics	√	√			√	√
MECH3408 Mechanics of fluids	√	√			√	√
MECH3409 Mechanics of solids	√				√	√
Discipline Advanced Elective Courses Specialization requirement						
MECH3416 Fundamentals of aeronautical engineering	√	√		√	√	√
MECH4404 Automatic control	√	√	√	√	√	√
MECH4414 Materials for engineering applications	√	√	√	√	√	√
MECH4415 Applied stress and strength analysis	√	√		√	√	√
MECH4421 Viscous flow	√	√		√	√	√
MECH4428 Sound and vibration	√	√		√	√	√
MECH6010 Service behaviour of materials	√	√		√		√
MECH6026 Computational fluid dynamics	√	√	√	√	√	√
MECH6047 Finite element analysis in mechanics	√	√	√	√		√
LATX7512 Aeronautical practice and prospects	√	√	√	√	√	√
LATX7514 Propulsion technology	√	√	√	√	√	√