



Master of Science in Hydropower Engineering Program

CURRICULAR STRUCTURE AND COURSE CYCLE

Proposed

Semester I		
Course Code	Course Description	Credit Hours
HYD 511	Hydrologic and hydraulic analysis	4
HDP 512	Geological and Geotechnical Engineering	4
HDP 513	Hydropower Planning and Development (integrated approach in planning, optimization, downstream benefit, multipurpose project, pump storage hydro)	3
	River and Sedimentation Engineering	4
		15
Semester II		
Course Code	Course Description	Credit Hours
SED 551	Hydraulic Structures I (Headworks and Dam Engineering)	4
RMT 551	Rock and Tunnel Engineering	4
	Environmental and Socioeconomic Analysis	2
	Elective I	3
	Legal and Institutional Aspects of Hydropower Development	3
		16
Semester III		
Course Code	Course Description	Credit Hours
HDP 611	Project Work / Internship	4
	Project Construction and Management	3
	Elective II	3
	Hydraulic Structures II(Gate and valves, hydraulic machines and other remaining related structures, electromechanical equipment, Power house planning, Hydraulic machines)	4
	Total	14
Semester IV		
Course Code	Course Description	Credit Hours
CMP 691	Thesis	15