# Cleveland State University Washkewicz College of Engineering

# Bachelor of Science in Mechanical Engineering Technology **NEW FALL 2014**

First Year										
Fall Semester	Credits	Major	Gen Ed	Spring Semester Credits N	Major	Gen Ed				
ENG 101 Writing I	3		W/C	ESC 102 Tech. Writing & Prof. Comm. 3		W/C				
MTH 148 Math for Business Majors I	3	Х	M/QL	PHY 221 College Physics I 5	Х	NS				
EET 205 DC Circuits	3	Х		ESC 120 Intro to Engineering Design 2	Х					
GET 255 Intro to Robotics & Auto Sys	3	Х		Business Elective 3	Х					
ESC 100 Orientation (Not required of transfer students)	1		INTRO	General Education Elective 3	Х	USDIV				
Semester Total	13			Semester Total 16						

Second Year											
Fall Semester	Credits	Major	Gen Ed		Spring Semester	Credits	Major	Gen Ed			
MET 201 Statics for Engineering Tech	3	Х			MET 202 Dynamics for Engineering Tech	3	Х				
CHM 261 General Chemistry I	3	Х	NS		MTH 149 Math for Business Majors II	4	Х	M/QL			
CHM 266 General Chemistry I Lab	1	Х	NS Lab		ESC 151 C Programming or GET 315 Adv. Prog. Methods	3	Х				
GET 285 Science of Alternative Energy	3	Х			MCE 181 Computer Aided Eng Lab II	2	Х				
MCE 180 Computer Aided Eng Lab I	2	Х			Communications Elective	3	Х	WAC			
Technical Elective	3	Х									
Semester Total	15				Semester Total	15					

Third Year											
Fall Semester	Credits	Major	Gen Ed		Spring Semester	Credits	Major	Gen Ed			
MTT 300 Applied Math	3	Х			MTT 301 Advanced Applied Math	3	Х				
MET 320 Adv. Mechanics of Materials	3	Х			MET 330 Adv Dynamics & Vibrations	3	Х				
MET 345 Thermodynamics	3	Х			MET 350 Fluid Mechanics	3	Х				
General Education Elective	3		A&H Non-US		MET 351 Thermal Fluids Lab	2	Х				
General Education Elective	3		SS		PHL 215 Engineering Ethics	3		A&H WAC			
Semester Total	15				Semester Total	14					

Fourth Year											
Fall Semester	Credits	Major	Gen Ed	Spring Semester	Credits	Major	Gen Ed				
MET 410 Design of Machine Elements	3	Х		GET 430 Elect Power, Cont, & Instru	3	Х					
MET 411 Mechanical Measurements Lab	1	Х		GET 431 Elect Power, Cont, & Instru Lab	1	Х	WAC				
MET 420 Heat Transfer	3	Х		MET 450 Mechanical System Desgin or GET 455 Robotic System Design or MET 460 Thermal System Design	3	Х					
MET 445 Solid Modeling Applications	3	Х		MET 480 Senior Design B	3	Х	CAP				
MET 470 Senior Design A	1	Х	CAP	Technical Elective	3						
Technical Elective	2	Х		General Education Elective	3		SS Non-US				
General Education Elective	3		AA-DIV								
Apply for Spring graduation prior to Sep 9th											
Semester Total	16			Semester Total	16						
Degree Total: 120 hours minimum											

Assumptions: college-level readiness in MTH & ENG; no Foreign Language Deficiency

## College/ Program Notes:

The plan above is a suggested guide to ensure that all General Education, College, University, and Major requirements are met within 4 years of study. Students may deviate from the suggested placement of Gen Ed courses, although the M/QL and W/C requirements should be completed during the first year of study.

\*General Electives ensure that a student accumulates the minimum credit hour totals needed for graduation. Students must have a minimum of 128 total credit hours, of which a minimum of 42 credit hours must be upper division (300 or 400-level courses). Depending upon other elective choices made, students may not need as many general electives as indicated above, or may need additional electives.

### **University Notes:**

INTRO = Introduction to University Life Requirement (one course)

W/C = Writing/Composition Requirement (two courses; C or better required)

M/QL = Mathematics/Quantitative Literacy Requirement (two courses)

NS = Natural Sciences (two courses, one of which must have a lab)

SS = Social Sciences Requirement (2 courses, one of which must be focused outside the US\*\*)

A&H = Arts & Humanities Requirement (2 courses, one must be focused outside the US\*\*)

DIV = Social Diversity Requirement (2 courses; one US Diversity and one African American Exp.)

WAC/SPAC = Writing/Speaking Across the Curriculum Requirement (3 courses, one in the major)

CAP = Capstone Requirement

\*\* of the SS and A&H courses focused outside the US, one must be focused on Africa, Latin America, Asia or the Middle East (ALAAME)

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