

# Course Guideline

## Automotive Design and Manufacturing Engineering (ADME) Program

(Apply for student ID 56-60)

### FIRST SEMESTER

#### Year 1/1

- 2190101 COMP PROG (8A)
- 2190151 COMP PROG LAB (co-8A)
- 2301107 CALCULUS I (1A)
- 2302103 GEN CHEM LAB
- 2302105 CHEM ENGS
- 2304153 PHYSICS ENGS
- 2304193 PHYSICS LAB ENGS
- 5501112 COMM ENG I (2A)

#### Year 2/1

- 2142251 MFG AUTO ENG I (3A)
- 2183212 STATICS (4A)
- 2183221 THERMODYNAMICS
- 2183271 AUTO ENG WORKSHOP
- 2183281 INTRO AUTO ENG
- 2184201 PROB STAT AUTO ENG
- 2301312 DIFF EQUATIONS (1C)

#### Year 3/1

- 2182310 ELEC INSTR AUTOM (5B)
  - 2183222 FLUID MECH (7A)
  - 2183261 MECH ENG LAB
  - 2183272 AUTO INSTR LAB
  - 2183331 MECH MAC
  - 2184302 PROD DEV PROC
  - 5501225 TECH WRIT (2C)
- SUMMER  2140301 INDUS TRAINING

#### Year 4/1

- 2142498 AUTO ENG PREPROJ
- 2183322 INT COMBN ENG
- 2183352 MOTOR VEH DSGN
- APPROVED ELECTIVE
- APPROVED ELECTIVE
- GENERAL EDUCATION
- GENERAL EDUCATION
- FREE ELECTIVE

### Note

- **co-Xa** is a co-requisite subject for Xa. If you take/drop/withdraw Xa subject, you have to take/drop/withdraw co-Xa.
- **Xa** is a prerequisite subject for Xb and xb is also a prerequisite subject for Xc. (Example: Have to pass 2a before register 2b)

### SECOND SEMESTER

#### Year 1/2

- 2140111 EXPL ENG WORLD
- 2183101 ENG GRAPHICS
- 2189101 ENG MAT
- 2301108 CALCULUS II (1B)
- 2304154 PHYS ELEC ENGS
- 2304194 PHYS ELEC LAB ENGS
- 5501123 COMM ENG II (2B)

#### Year 2/2

- 2142201 ENG FIRST
- 2142252 MFG AUTO ENG II (3B)
- 2182210 ELEC CIRC (5A)
- 2182213 ELEC CIRC LAB
- 2183213 MECH MAT (4B)
- 2183231 DYNAMICS (6A)
- 5501214 COM PRES SKIL (2C)

#### Year 3/2

- 2142424 VEH DYNAMICS (6B)
- 2183321 HEAT TRANSFER (7B)
- 2183332 CAD/CAM/CAE
- 2183351 MECH ENG DSGN
- 2184303 ENG MGT
- GENERAL EDUCATION

#### Year 4/2

- 2142499 AUTO ENG PROJECT
- APPROVED ELECTIVE
- GENERAL EDUCATION
- FREE ELECTIVE

(Total Credits for graduation 147)

**Course Guideline**  
**Aerospace Engineering (AERO) Program**  
**(Apply for student ID 56-60)**

**FIRST SEMESTER**

Year 1/1

- 2190101 COMP PROG
- 2190151 COMP PROG LAB
- 2301107 CALCULUS I (1A)**
- 2302103 GEN CHEM LAB
- 2302105 CHEM ENGS
- 2304153 PHYSICS ENGS
- 2304193 PHYSICS LAB ENGS
- 5501112 COMM ENG I (2A)**

Year 2/1

- 2145211 INTRO AERO ENG
- 2183211 ENG MECH
- 2183221 THERMODYNAMICS (3A)**
- 2301215 MULTIVAR CALCULUS (1C)/ (4A)**
- 2301216 LIN ALG DIFFL EQ (1C)**
- 5501213 TECH COMM I (5A)**

Year 3/1

- 2145311 AERODYNAMICS I (7B)**
- 2145321 AIR STRUC (9A)**
- 2145324 MOD CTRL DYNAM SYS (10A)**
- 2145361 AERO ENG LAB I (11A)**
- 2183381 NUM METH ENG
- 5501315 TECH COMM III (5C)**
- GENERAL EDUCATION

SUMMER  2140301 INDUS TRAINING

Year 4/1

- 2145363 AERO ENG LAB III (11C)**
- 2145402 AIR PROPULSION (3B), (7B)**
- 2145451 AIR DSGN (6B)**
- 5501417 TECH COMM V (5E)**
- APPROVED ELECTIVE
- GENERAL EDUCATION

**SECOND SEMESTER**

Year 1/2

- 2140111 EXPL ENG WORLD
- 2183101 ENG GRAPHICS
- 2189101 ENG MAT
- 2301108 CALCULUS II (1B)**
- 2304154 PHYS ELEC ENGS
- 2304194 PHYS ELEC LAB ENGS
- 5501123 COMM ENG II (2B)**

Year 2/2

- 2145221 INTRO AIR DESIGN (6A)**
- 2145230 AIR ELEC
- 2145290 AERO ENG SEM I
- 2182203 PROB STAT ENGS (1C)**
- 2183222 FLUID MECH (7A)**
- 2183231 DYNAMICS (8A)**
- 2301317 METH APP MATH (4B)**
- 5501224 TECH COMM II (5B)**

Year 3/2

- 2145312 AERODYNAMICS II (3B), (7C)**
- 2145322 AIR STRUC II (9B)**
- 2145325 FLIGHT MECH (8B), (10B)**
- 2145362 AERO ENG EXP LAB II (11B)**
- 2145390 AERO ENG SEM II
- 5501326 TECH COMM IV (5D)**
- GENERAL EDUCATION

Year 4/2

- 2145490 AERO ENG SEM III
- 2145499 AERO ENG PROJ
- APPROVED ELECTIVE
- FREE ELECTIVE
- FREE ELECTIVE
- GENERAL EDUCATION

**Note**

- **Xa** is a prerequisite subject for Xb and Xb is also a prerequisite subject for Xc. (Ex: Have to pass 2a before register 2b)

(Total Credits for graduation 146)

**Course Guideline**  
**Information and Communication Engineering (ICE) Program**  
**(Apply for student ID 56-60)**

**FIRST SEMESTER**

Year 1/1

- 2190101 COMP PROG (1A)
- 2190151 COMP PROG LAB
- 2301107 CALCULUS I (2A)
- 2302103 GEN CHEM LAB
- 2302105 CHEM ENGS
- 2304153 PHYSICS ENGS
- 2304193 PHYSICS LAB ENGS
- 5501112 COMM ENG I (3A)

Year 2/1

- 2143101 INTRO ICE
- 2182202 ADV MATH METH (2C)
- 2182211 ELEC CIR ICE (4B)
- 2182212 CIR DIG ELEC LAB (co-4B)
- 2190102 ADV COMP PROG (1B)/ (5A)
- 2190152 ADV COMP PROG LAB (co-5A)
- 2190200 DISCRETE STRUC
- GENERAL EDUCATION

Year 3/1

- 2182370 INTRO DIG COMM
- 2182371 PRIN DATA COMM
- 2184301 ENG ECON APP
- 2190213 PRIN INFO SYS
- 2190472 NETCENT ARCH (1B)
- 5501214 COM PRES SKIL (3C)
- SUMMER  2140301 INDUS TRAINING

Year 4/1

- 2143491 ICE PREPROJ (8A)
- 2190415 ENT INFO SYS
- APPROVED ELECTIVE
- APPROVED ELECTIVE
- FREE ELECTIVE
- GENERAL EDUCATION

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- **Xa** is a prerequisite subject for Xb and xb is also a prerequisite subject for Xc. (Example: Have to pass 2a before register 2b)

**SECOND SEMESTER**

Year 1/2

- 2140111 EXPL ENG WORLD
- 2183101 ENG GRAPHICS
- 2189101 ENG MAT
- 2301108 CALCULUS II (2B)
- 2304154 PHYS ELEC ENGS (4A)
- 2304194 PHYS ELEC LAB ENGS
- 5501123 COMM ENG II (3B)

Year 2/2

- 2182203 PROB STAT ENG (2C)
- 2182204 SIG LIN SYS (2D)
- 2184202 TECH ENG MGT
- 2190221 FUND DS ALG (1B)/(6A)
- 2190250 COMP ARCH ORG
- 2190261 FUND DS ALG LAB (co-6A)
- GENERAL EDUCATION

Year 3/2

- 2143399 ICE CAPSTONE
- 2182372 PRIN TELECOMM
- 2184304 FUND OM
- 2190422 DATABASE SYS (7A)
- 2190423 SOFTWARE ENG
- 2190462 DATABASE SYS LAB (co-7A)
- 5501225 TECH WRIT (3C)
- GENERAL EDUCATION

Year 4/2

- 2143499 ICE PROJECT (8B)
- APPROVED ELECTIVE
- APPROVED ELECTIVE
- APPROVED ELECTIVE
- FREE ELECTIVE
- GENERAL EDUCATION

(Total Credits for graduation 146)

# Course Guideline

## Nano Engineering (NANO) Program

(Apply for student ID 56-59)

### FIRST SEMESTER

#### Year 1/1

- 2190101 COMP PROG (8A)
- 2190151 COMP PROG LAB (co-8A)
- 2301107 CALCULUS I (1A)**
- 2302103 GEN CHEM LAB (2A)**
- 2302105 CHEM ENGS (3A)**
- 2304153 PHYSICS ENGS
- 2304193 PHYSICS LAB ENGS
- 5501112 COMM ENG I (4A)**

#### Year 2/1

- 2182201 MATH NANO (1C)**
- 2182210 ELEC CIRC (5B)**
- 2183211 ENG MECH
- 2189201 INTRO MAT SCI ENG
- 2303111 BIO ENG
- 2303112 BIOLOGY LAB ENGR
- 5501214 COM PRES SKIL (4C)**

#### Year 3/1

- 2182311 MST INSTR (5C)**
- 2185320 INORG CHEM NANO ENG
- 2189341 MAT CHARN
- 2189336 MAT DLY LIFE
- APPROVED ELECTIVE

SUMMER  **2140301 INDUS TRAINING (1C)**

#### Year 4/1

- 2141491 RES METHODO
- 2141498 NANO PREPROJ
- APPROVED ELECTIVE
- APPROVED ELECTIVE
- APPROVED ELECTIVE
- GENERAL EDUCATION
- FREE ELECTIVE

### Note

- **Xa** is a prerequisite subject for Xb and xb is also a prerequisite subject for Xc. (Example: Have to pass 2a before register 2b)

### SECOND SEMESTER

#### Year 1/2

- 2140111 EXPL ENG WORLD
- 2183101 ENG GRAPHICS
- 2189101 ENG MAT
- 2301108 CALCULUS II (1B)**
- 2304154 PHYS ELEC ENGS (5A)**
- 2304194 PHYS ELEC LAB ENGS
- 5501123 COMM ENG II (4B)**

#### Year 2/2

- 2182203 PROB STAT ENG (1C)**
- 2182213 ELEC CIRC LAB
- 2182280 SEMICONDEVI I
- 2185220 BSC ORG CHEM (3B)**
- 2185221 ORG CHEM LAB (2B)**
- 2185222 PHYS CHEM NANO
- 5501225 TECH WRIT (4C)**

#### Year 3/2

- 2184303 ENG MGT
- 2185322 THERMO NANO
- 2185333 TRANS PHENOM
- GENERAL EDUCATION
- APPROVED ELECTIVE

#### Year 4/2

- 2141490 NANO SEM
- 2141499 NANO ENG PROJ
- APPROVED ELECTIVE
- GENERAL EDUCATION
- GENERAL EDUCATION
- FREE ELECTIVE

(Total Credits for graduation 146)