Course Guideline

AUTOMOTIVE DESIGN AND MANUFACTURING ENGINEERING (ADME) Program

(Apply for student ID 66 - 69)

FIRST SEMESTER

Year 1/1

☐2190101	COMP PROG **(co-4a)**	3 CREDITS
☐2190151	COMP PROG LAB **(4a)**	1 CREDIT
☐2301107	CALCULAS I **(1a)**	3 CREDITS
☐2189101	ENG MAT	3 CREDITS
☐2183103	FUND ENG GRAPHICS	3 CREDITS
☐2304153	PHYS ENGS	3 CREDITS
☐2304193	PHYS LAB ENGS	1 CREDIT
☐5501112	COM ENG I	3 CREDITS
Total		**20 CREDITS**

Year 2/1

☐2142413*	MFG AUTO ENG	2 CREDITS
☐2183212	STATICS **(2a)**	3 CREDITS
☐2183221	THERMODYNAMICS	3 CREDITS
☐2183282*	INTRO AUTO ENG	3 CREDITS
☐2184201	PROB STAT AUTO ENG	3 CREDITS
☐2301312	DIFF EQUATIONS **(1c)**	3 CREDITS
Total		**17 CREDITS**

Year 3/1

☐2183325*	SYS MODEL VIBRA	2 CREDITS
☐2182215*	FUND ELEC MACHINES	2 CREDITS
☐2182216*	ELEC ENG LAB	1 CREDIT
☐2183323	FUND FLUID MECH HEAT	3 CREDITS
☐2183261	MECH ENG LAB	2 CREDITS
☐2183332	CAD/CAM/CAE	3 CREDITS
☐5501225	TECH WRITING **(PRE 5501123)**	3 CREDITS
Total		**16 CREDITS**

Year 3/3 (SUMMER)

☐2140301	INDUS TRAINING	2 CREDITS

Year 4/1

☐2183427*	MOD VEH SYS DESIGN	3 CREDITS
☐2182431*	SYS DYNAM CTRL	2 CREDITS
☐XXXXXX	COM ELEC I	3 CREDITS
☐XXXXXX	GENERAL EDUCATION	3 CREDITS
☐XXXXXX	GENERAL EDUCATION	3 CREDITS
☐XXXXXX	FREE ELECTIVE	3 CREDITS
Total		**17 CREDITS**

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)

- **co-Xa** is a co-requisite subject for Xa. If you take/drop/withdraw Xa subject, you have to take/drop/withdraw co-Xa

SECOND SEMESTER

Year 1/2

☐2140111	EXPL ENG WORLD	3 CREDITS
☐2302105	CHEM ENG	3 CREDITS
☐2302103	GEN CHEM LAB	3 CREDITS
☐2301108	CALCULAS II **(1b)**	3 CREDITS
☐2304154	PHYS ELEC ENGS	3 CREDITS
☐2304194	PHYS ELEC LAB ENGS	1 CREDIT
☐5501123	COM ENG II **(PRE 5501112)**	3 CREDITS
Total		**18 CREDITS**

Year 2/2

☐2147104*	ENG DSGN THINKING	3 CREDITS
☐2182214*	FUND ELEC CIRCUITS	2 CREDITS
☐2183213	MECH MAT **(2b)**	3 CREDITS
☐2183231	DYNAMICS **(3a)**	3 CREDITS
☐2301216*	LIN ALG	3 CREDITS
☐5501214	COM PRES SKILLS **(PRE 5501123)**	3 CREDITS
Total		**17 CREDITS**

Year 3/2

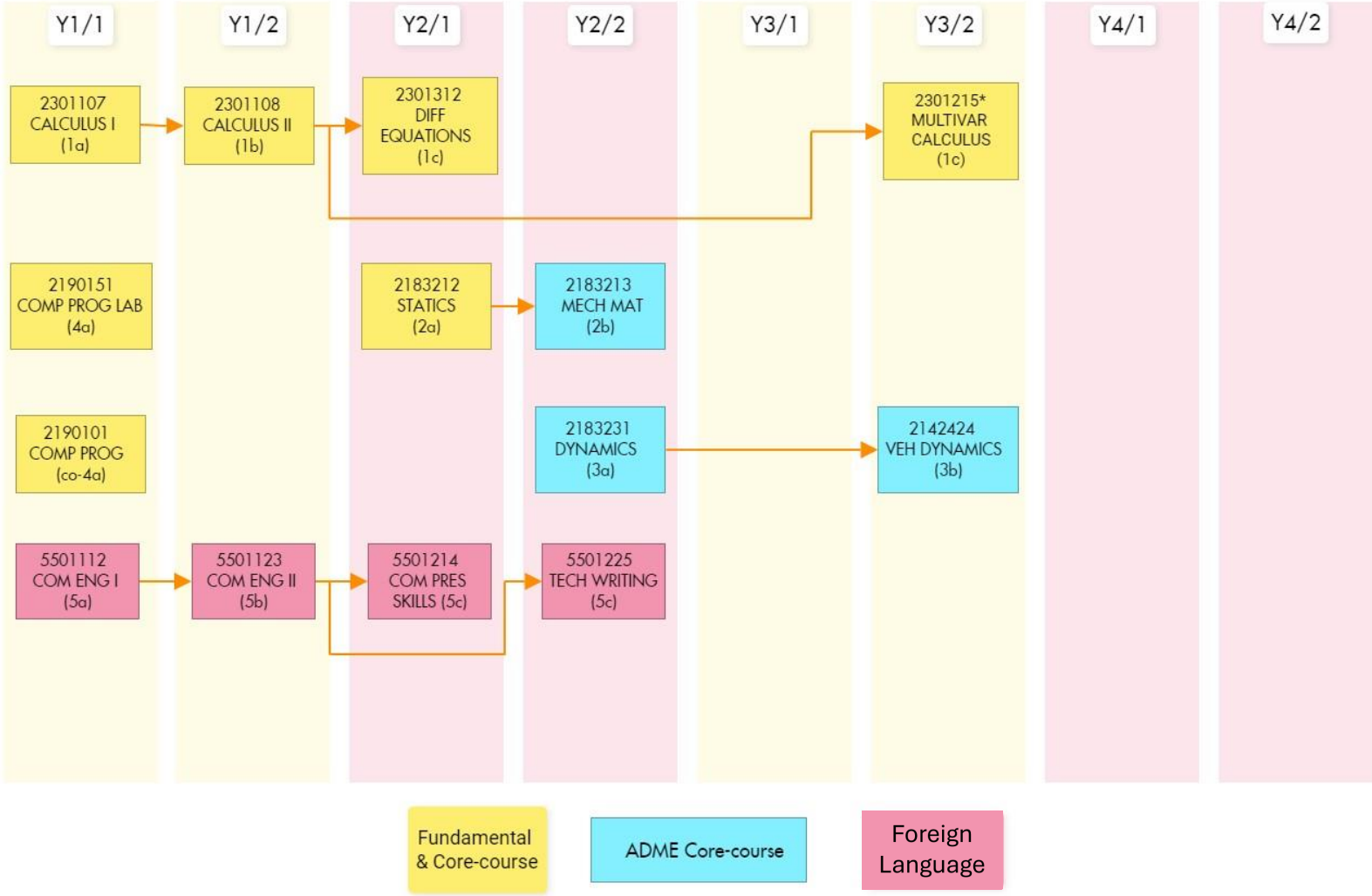
☐2142424	VEH DYNAMICS **(3b)**	3 CREDITS
☐2183351	MECH ENG DSGN	3 CREDITS
☐2184344*	XEV PROP SYS	3 CREDITS
☐2142344	MANAGE AUTO IND	3 CREDITS
☐2301215*	MULTIVAR CALCULUS **(1c)**	3 CREDITS
☐XXXXXX	GENERAL EDUCATION	3 CREDITS
Total		**18 CREDITS**

Year 4/2

☐2142499	AUTO ENG PROJECT	3 CREDITS
☐2182570*	DIGI SYS IOT AUTO TECH	3 CREDITS
☐2100201*	INTRO TO ART INTEL	3 CREDITS
☐XXXXXX	GENERAL EDUCATION	3 CREDITS
☐XXXXXX	FREE ELECTIVE	3 CREDITS
Total		**15 CREDITS**

TOTAL CREDITS FOR GRADUATION **138**

ADME Program
(Apply for student ID 66-69)



Course Guideline

Information and Communication Engineering (ICE) Program

(Apply for student ID 66 - 69)

FIRST SEMESTER

Year 1/1

☐2140111	EXPL ENG WORLD	3 CREDITS
☐2190101	COMP PROG (1a)	3 CREDITS
☐2301107	CALCULUS I (3a)	3 CREDITS
☐2304153	PHYSICS ENGS	3 CREDITS
☐2304193	PHYSICS LAB ENGS	1 CREDITS
☐5501112	COM ENG I	3 CREDITS
☐XXXXXX	GEN EDUCATION	3 CREDITS
Total		**19 CREDITS**

Year 2/1

☐2182202	ADV MATH METH (3c)	3 CREDITS
☐2182214*	ELEC CIR ICE (4a)	3 CREDITS
☐2182212	CIR DIG ELEC LAB (co-4a)	1 CREDITS
☐2190200	DISCRETE STRUC	3 CREDITS
☐2190222*	FUND DS ALG (1b)	4 CREDITS
☐2190513*	DATA SCI (1b)/(2b)	3 CREDITS
Total		**17 CREDITS**

Year 3/1

☐2190250	COMP ARCH ORG	3 CREDITS
☐2190443	USER INT DSGN	3 CREDITS
☐2182372**	PRIN TELECOMM	3 CREDITS
☐2184301	ENG ECON APP	3 CREDITS
☐2190472	NETCENT ARCH (1b)	3 CREDITS
☐XXXXXX	ELECTIVE	3 CREDITS
Total		**18 CREDITS**

Year 3/3 (SUMMER)

☐2140301	INDUS TRAINING	2 CREDITS

Year 4/1

☐2143491	ICE PREPROJ (5a)	1 CREDITS
☐XXXXXX	ELECTIVE	6 CREDITS
☐XXXXXX	FREE ELECTIVE	3 CREDITS
Total		**10 CREDITS**

SECOND SEMESTER

Year 1/2

☐2143101	INTRO ICE	3 CREDITS
☐2182205*	PROB STAT DATA (2a)	3 CREDITS
☐2190103*	ADV COMP PROG (1b)	3 CREDITS
☐2301108	CALCULUS II (3b)	3 CREDITS
☐2304154	PHYS ELEC ENGS	3 CREDITS
☐2304194	PHYS ELEC LAB ENGS	1 CREDITS
☐5501123	COM ENG II **(Pre 5501112)**	3 CREDITS
Total		**19 CREDITS**

Year 2/2

☐2182204	SIG LIN SYS	3 CREDITS
☐2190512*	APP DEV	3 CREDITS
☐2190514*	AI	3 CREDITS
☐5501214	COM PRE SKILL **(Pre 5501123)**	3 CREDITS
☐XXXXXX	GEN EDUCATION	3 CREDITS
☐XXXXXX	FREE ELECTIVE	3 CREDITS
Total		**18 CREDITS**

Year 3/2

☐2143399	ICE CAPSTONE	3 CREDITS
☐2182371	PRIN DATA COMM	3 CREDITS
☐2190426*	DATABASE SYS	3 CREDITS
☐2190423	SOFTWARE ENG	3 CREDITS
☐2190413	SYS SECURITY	3 CREDITS
☐5501225	TECH WRIT **(Pre 5501123)**	3 CREDITS
Total		**15 CREDITS**

Year 4/2

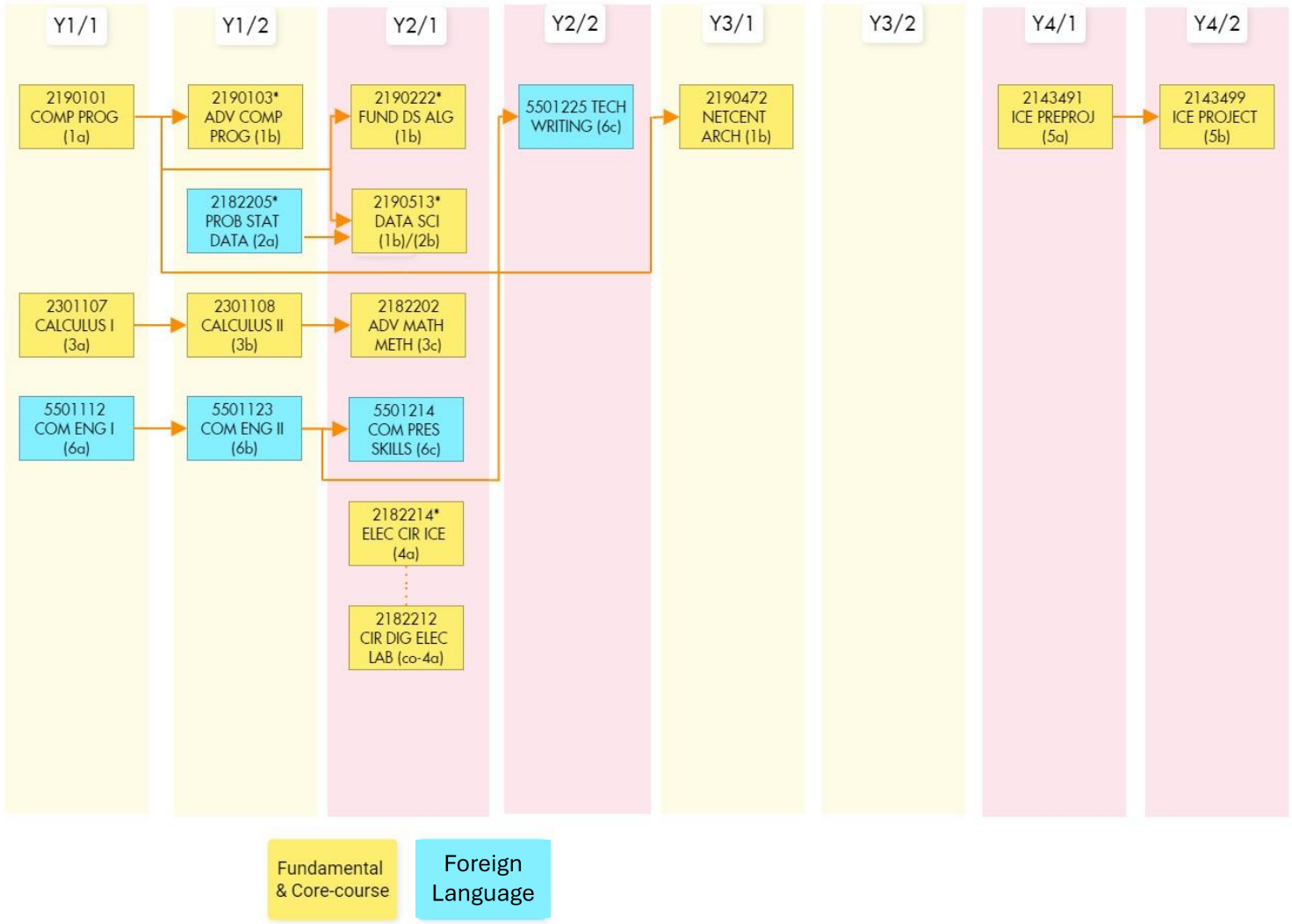
☐2143499	ICE PROJECT (5b)	3 CREDITS
☐2190516*	TECH MGT	3 CREDITS
☐XXXXXX	GEN EDUCATION	6 CREDITS
Total		**12 CREDITS**

TOTAL CREDITS FOR GRADUATION 133

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)
- **co-Xa** is a co-requisite subject for Xa. If you take/drop/withdraw Xa subject, you have to take/drop/withdraw co-Xa

ICE Program
(Apply for student ID 66 – 69)



Course Guideline

Aerospace Engineering (AERO) Program

(Apply for student ID 66 – 69)

FIRST SEMESTER

Year 1/1

☐2183102*	COM AID DES ENG	3 CREDITS
☐2145211**	INTRO AERO ENG	3 CREDITS
☐2301107	CALCULUS I (1a)	3 CREDITS
☐2304153	PHYSICS ENGS.	3 CREDITS
☐2304193	PHYSICS LAB ENGS	1 CREDITS
☐5501112	COM ENG I	3 CREDITS
Total		**16 CREDITS**

Year 2/1

☐2145218*	SCI PROG	2 CREDITS
☐2183211	ENG MECH	4 CREDITS
☐2183221	THERMODYNAMICS (2a)	3 CREDITS
☐2301215	MULTIVAR CALCULUS (1c)	3 CREDITS
☐2301216	LIN ALG DIFF EQ (1c)	3 CREDITS
☐5501214	COM PRES SKILLS (Pre 5501123)	3 CREDITS
Total		**18 CREDITS**

Year 3/1

☐2145311	AERODYNAMICS I (3b)	3 CREDITS
☐2145326	AIR STRUC	3 CREDITS
☐2145427*	ELEC FOR AERO ENG	2 CREDITS
☐2145327	AIR PERFORM	3 CREDITS
☐2145453	MAT AERO ENG	3 CREDITS
☐XXXXXX	GEN EDUCATION	3 CREDITS
Total		**17 CREDITS**

Year 3/3 (SUMMER)

☐2140301	INDUS TRAINING	2 CREDITS

Year 4/1

☐2145475*	AERO ENG PROJ I (5a)	2 CREDITS
☐2145461	AIR DSGN	3 CREDITS
☐XXXXXX	APPROVED ELECTIVE	3 CREDITS
☐XXXXXX	APPROVED ELECTIVE	3 CREDITS
☐XXXXXX	GEN EDUCATION	3 CREDITS
☐XXXXXX	AI & BIG DATA	3 CREDITS
Total		**17 CREDITS**

SECOND SEMESTER

Year 1/2

☐2145221	INTRO AIR DSGN	1 CREDITS
☐2140111**	EXPL ENG WORLD	3 CREDITS
☐2301108	CALCULUS II (1b)	3 CREDITS
☐2302103	GEN CHEM LAB	1 CREDITS
☐2302105	CHEM ENGS	3 CREDITS
☐2304154	PHYS ELEC ENGS	3 CREDITS
☐2304194	PHYS ELEC LAB ENGS	1 CREDITS
☐5501123	COM ENG II **(Pre 5501112)**	3 CREDITS
Total		**18 CREDITS**

Year 2/2

☐2182203	PROB STAT ENG (1c)	3 CREDITS
☐2183222	FLUID MECH (3a)	3 CREDITS
☐2183231	DYNAMICS	3 CREDITS
☐2183381**	NUM METH ENG	3 CREDITS
☐XXXXXX	INTERDISCIPLINARY & 21ST CENTURY SKILLS	3 CREDITS
☐5501225	TECH WRITING (Pre 5501123)	3 CREDITS
Total		**18 CREDITS**

Year 3/2

☐2145312	AERODYNAMICS II (2b)/(3c)/(4a)	3 CREDITS
☐2145328	AIR STAB CONT	3 CREDITS
☐2145365*	EXP AERO ENG	2 CREDITS
☐2145329	AIR PROPULSION (2b)/(3b)/(co-4a)	3 CREDITS
☐XXXXXX	FREE ELECTIVE	3 CREDITS
☐XXXXXX	GEN EDUCATION	3 CREDITS
Total		**17 CREDITS**

Year 4/2

☐2145473	ROCKET PROPULSION (2b)/(3b)/(co-4a)	2 CREDITS
☐2145476*	AERO ENG PROJ II (5b)	3 CREDITS
☐2145493	SP ENV	2 CREDITS
☐XXXXXX	FREE ELECTIVE	3 CREDITS
☐XXXXXX	GEN EDUCATION	3 CREDITS
Total		**13 CREDITS**

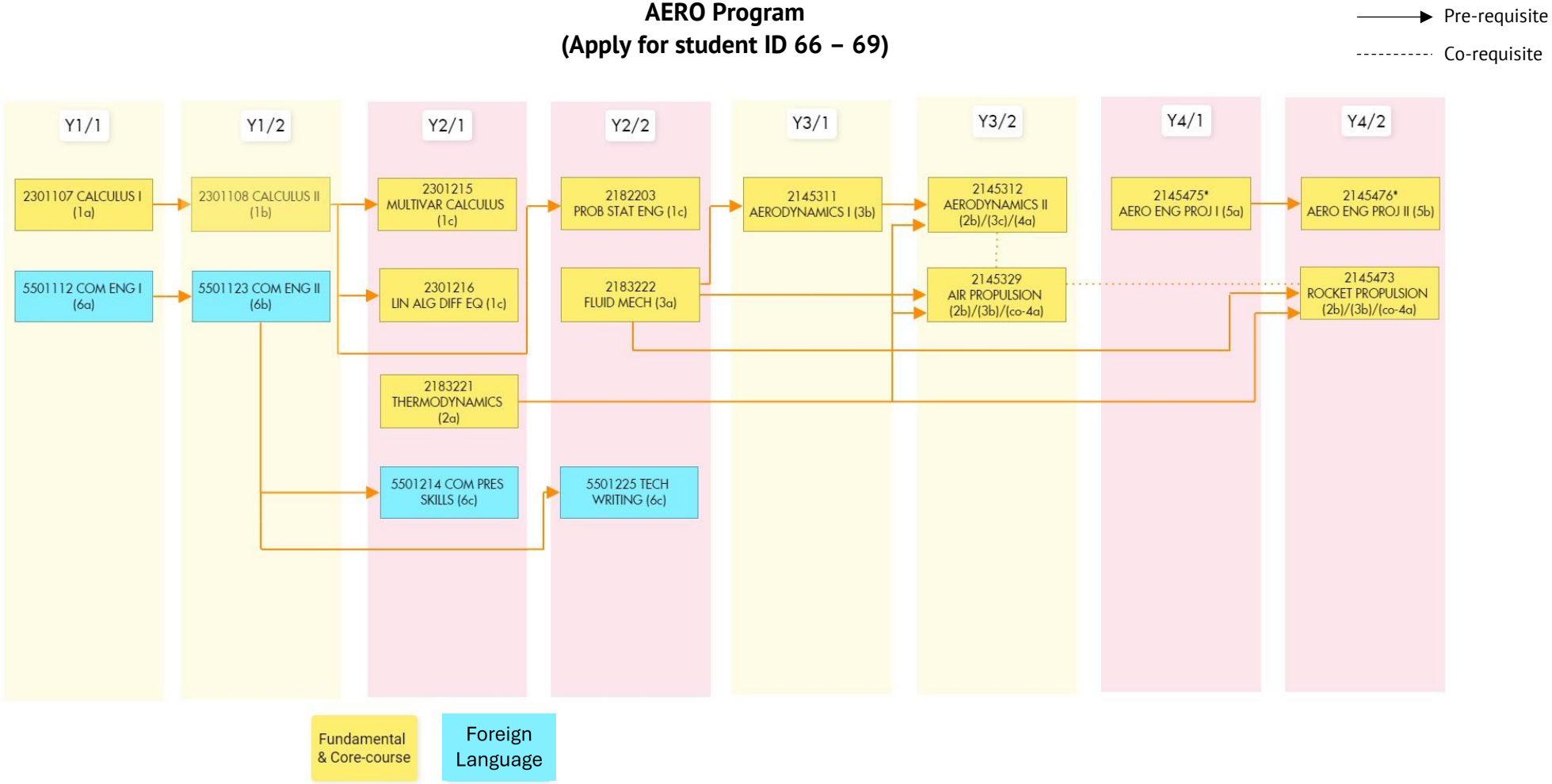
TOTAL CREDITS FOR GRADUATION 136

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)

- **co-Xa** is a co-requisite subject for Xa. If you take/drop/withdraw Xa subject, you have to take/drop/withdraw co-Xa

AERO Program
(Apply for student ID 66 – 69)



Course Guideline

Robotics and Artificial Intelligence Program

(Apply for student ID 66 – 69)

FIRST SEMESTER

Year 1/1

☐2147103	DISCRETE MATH	3 CREDITS
☐2190101	COM PROG **(3a)**	3 CREDITS
☐2301107	CALCULUS I **(1a)**	3 CREDITS
☐2304153	PHYSICS ENGS **(2a)**	3 CREDITS
☐2304193	PHYS LAB ENGS **(co-2a)**	1 CREDIT
☐2147111	EXPL ROBOTICS ENG	3 CREDITS
☐5501112	COM ENG I	3 CREDITS
Total		**19 CREDITS**

Year 2/1

☐2147207*	LIN ALG **(1c)**	3 CREDITS
☐2147208*	MULIT CAL **(1c)**	3 CREDITS
☐5501214	COM PRE SKIL **(Pre 5501123)**	3 CREDITS
☐2183212	STATICS **(4a)**	3 CREDITS
☐2147210*	FUND DIG CIR	3 CREDITS
☐2147214*	3D CAD MOD M-DSGN	3 CREDITS
Total		**18 CREDITS**

Year 3/1

☐2147320	FEED CON SYS **(5b)**	3 CREDITS
☐2147313*	DSGN MACH ELEM	3 CREDITS
☐2147105	DATA STRUC ALG **(3b)**	3 CREDITS
☐2147104*	ENGR DSGN THNK	3 CREDITS
☐2147301*	ROBOTICS LAB **(6a)**	1 CREDIT
☐2147311*	DIG LOG DSGN	3 CREDITS
☐2147332	AI	3 CREDITS
Total		**19 CREDITS**

Year 3/3 (SUMMER)

☐2140301	INDUS TRAINING	2 CREDITS

Year 4/1

☐2147498*	CAPSTONE DSGN I **(7a)**	3 CREDITS
☐XXXXXX	CONCENTRATION COURSE	3 CREDITS
☐XXXXXX	CONCENTRATION COURSE	3 CREDITS
☐XXXXXX	GENERAL EDUCATION	3 CREDITS
☐XXXXXX	FREE ELECTIVE	3 CREDITS
Total		**15 CREDITS**

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)

- **co-Xa** is a co-requisite subject for Xa. If you take/drop/withdraw Xa subject, you have to take/drop/withdraw co-Xa

SECOND SEMESTER

Year 1/2

☐2301108	CALCULUS II **(1b)**	3 CREDITS
☐2304154	PHYS ELEC ENGS **(2b)**	3 CREDITS
☐2304194	PHYS ELEC LAB ENGS **(co-2b)**	1 CREDIT
☐2182203	PROB STAT ENG	3 CREDITS
☐5501123	COM ENG II **(Pre 5501112)**	3 CREDITS
☐XXXXXX	GENERAL EDUCATION	3 CREDIT
Total		6 **CREDITS**

Year 2/2

☐5501225	TECH WRIT (**Pre 5501112)**	3 CREDITS
☐2183213	MECH MAT **(4b)**	3 CREDITS
☐2147209*	DIFF-EQ MO-SIM-NUM **(5a)/(co-4b)**	4 CREDITS
☐2147215*	DSCI DVISU ANAL	3 CREDITS
☐2147216*	SE-SI-ACT ROB PROJ	3 CREDITS
☐2183231	DYNAMICS **(4b)/(co-4a)**	3 CREDITS
Total		19 **CREDITS**

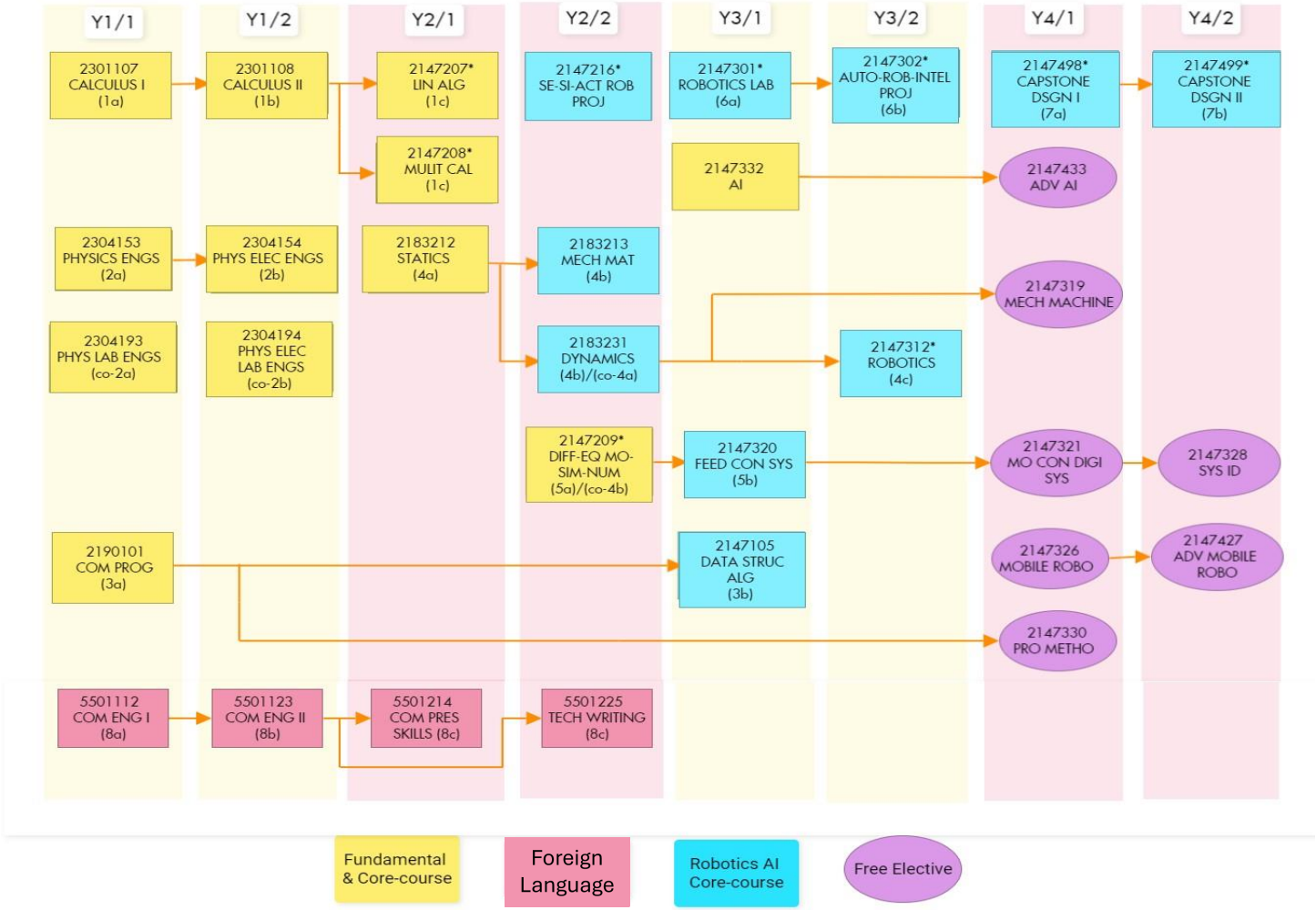
Year 3/2

☐2147312*	ROBOTICS **(4c)**	3 CREDITS
☐2147302*	AUTO-ROB-INTEL PROJ **(6b)**	3 CREDITS
☐XXXXXX	MARKET MANAGE ENG	3 CREDITS
☐XXXXXX	CONCENTRATION COURSE	3 CREDITS
☐XXXXXX	CONCENTRATION COURSE	3 CREDITS
☐XXXXXX	GENERAL EDUCATION	3 CREDITS
Total		18 **CREDITS**

Year 4/2

☐2147499*	CAPSTONE DSGN II **(7b)**	3 CREDITS
☐XXXXXX	CONCENTRATION COURSE	3 CREDITS
☐XXXXXX	GENERAL EDUCATION	3 CREDITS
☐XXXXXX	FREE ELECTIVE	3 CREDITS
Total		**12 CREDITS**

TOTAL CREDITS FOR GRADUATION **138**

ROBOTICS AI Program

(Apply for student ID 66-69)