

Packaging Curriculum Guide for PACKAGING SCIENCE TRACK (fall 2016 or later)

University Requirements—**PKG MAJORS DO NOT NEED ISP/ISB**

Course	Credits	Prereqs	Semester Offered
WRA 110-150	4	None	FS, SS, US
IAH 201-210	4	Completion of Tier 1 writing	FS, SS, US
IAH 211 or higher	4	IAH 201-210	FS, SS, US
ISS 200 level	4	None	FS, SS, US
ISS 300 level	4	ISS 200 Level	FS, SS, US

Math and Science

Course	Credits	Prereqs	Semester Offered
CEM 141: General Chemistry	4	MTH 103 preferred	FS, SS, US
CEM 161: Chemistry Lab	1	CEM 141 or concurrently	FS, SS, US
CEM 143: Survey of Organic Chemistry	4	CEM 141	FS, SS, US
PHY 231: Physics 1	3	MTH 103	FS, SS, US
PHY 232: Physics 2	3	PHY 231	FS, SS
FSC 342: Food Safety or MMG 201: Fundamentals of Microbiology	3	CEM 141	FSC 342: FS only MMG 201: SS, US
MTH 132: Calculus 1	3	MTH 103 and 114, or 116, or placement test	FS, SS, US
MTH 133: Calculus 2	4	MTH 132	FS, SS, US
STT 200, 201, or 351: Statistics	3-4	MTH 103 or higher	FS, SS, US

****CEM 141, PHY 231, MTH 132 and MTH 133 MUST be complete prior to reaching 56 credits for junior admission to the PKG program. A 2.0 is required in these classes. A 3.0 overall GPA is required for junior admission****

****Substitutions for higher level math and science coursework completed are accepted****

Concentration area (PKG science or PKG Value Chain Management) selected by Junior year

Required Business/Economics

Course	Credits	Prereq	Semester offered
EC 201: Microeconomics or EC 202: Macroeconomics	3	None	FS, SS, US
MKT 327: Intro to Marketing or SCM 304: Intro to Supply Chain Management	3	Junior standing for MKT 327	FS, SS, US

Packaging Core—Science Track

Course	Credits	Prereqs	Semester Offered
PKG 101: Principles of PKG	3	None	FS, SS, US online
PKG 102: Intro PKG seminar	2	PKG 101 or concurrent, PKG majors only	FS, SS
PKG 221: Glass and Metal	2	PKG majors, CEM 141, PHY 231, PKG 102 or concurrent, sophomore status	FS, SS
PKG 315: PKG Decision Systems	3	PKG major, MTH 132, PKG 221 or concurrent	FS, SS
PKG 322: Paper and Paperboard	4	PKG majors, CEM 143, STT 200, MTH 133, PKG 221 or concurrent	FS, SS
PKG 323: Plastics	4	PKG majors, CEM 143, STT 200, MTH 133, PKG 221 or concurrent	FS, SS
PKG 410: Distribution PKG Dynamics	4	PKG majors, PKG 322/323	FS, SS
PKG 411: PKG Development Technology	3	PKG majors, PKG 322/323	FS, SS
PKG 432: PKG Processes	4	PKG majors, PKG 322/323, PHY 232	FS, SS
PKG 452: Medical PKG or PKG 455: Food PKG	3-4	PKG majors, PKG 322/323	PKG 452: FS online PKG 455: SS
PKG 485: PKG Development	3	PKG majors, all previous PKG core, senior standing	FS, SS
PKG 486: PKG senior capstone	3	PKG 485, senior standing	FS, SS

PKG Electives—6 credits required

Course	Credits	Prereqs	Semester Offered
PKG 421: Virtual Package Design	3	PKG 322/323/411	SS
PKG 430: Packaging for Fast Moving Consumer Goods (FMCG)	3	PKG 322/323	FS
PKG 452: Medical PKG	4	PKG 322 OR 323	FS
PKG 455: Food PKG	3	PKG 322&323	SS
PKG 456: Perishables	3	PKG 322 & 323	FS online
PKG 465: Value Chain	3	PKG 322/323	US online, FS live
PKG 470: Packaging Sustainability	3	PKG 315, 322, 323	SS
PKG 477: Hazmat PKG	3	PKG 322 & 323 recommended	US online
PG 491: Special Topics	1-4 varies	Varies—includes study abroad	US, FS, SS
PKG 493: Internship Maximum 6 credits—only counts toward PKG electives ONCE, second internships count as free electives	3	PKG 101, 221, 315, 322, 323. Override Only	FS, SS, US
PKG 499: Packaging Undergrad Research	1-4 varies		FS, SS

*Note: PKG 452 and 455 are listed both places. They cannot double count for the core requirement and the elective requirement. HOWEVER, if you take one for the core, you may take the other as an elective (i.e. PKG 452 to count for core packaging science requirement, PKG 455 to count for 3 credits of PKG elective)

PACKAGING SCIENCE CONCENTRATION

9 credits required, cannot double count with any classes taken previously to meet degree requirements. This is not an exhaustive list—consult with your advisor. At least one course must be at 300 level.

Course	Credits	Prereqs	Semester Offered
BMB 200: Intro to Biochem	4	CEM143	FS (Live), US (online)
BMB 400: Intro to Bioinformatics	3	STT 200, MMG201 OR BMB 200	FS
CSE 231: intro to programming 1	4	MTH 132	FS, SS, US
CSE 232: intro to programming 2	4	MTH 132, CSE 231	FS, SS
CSUS 200: Intro to Sustainability	3	None	FS, SS
CSUS 300: Theoretical Foundations of Sustainability	3	CSUS 200, WRA 101	FS, SS
FW364: Ecological Problem Solving	3		FS, SS
FW444: Conservation Biology			ss
FOR 414: Renewable Wood Products	3	CEM 141	FS
FSC 211: Principles of Food Science	3	None	FS (live), US (online)
FSC 325: Food Processing Unit Operations	3	FSC 211	
FSC 342: Food Safety	3	None	FS only
FSC 401: Food Chemistry	3	BMB 200, junior or seniors	SS
FSC 421: Food Laws and Regulations	3	FSC 211 or HNF 150 or HNF 260 or ABM 100	SS
FSC 440: Food Microbiology	3	MMG 201	FS
FSC 441: Food microbiology lab	2	FSC 440 or concurrently, WRA 101	FS
IBIO 355: Ecology	3		
MMG 201: Fundamentals of Microbiology	3		SS, US
MMG 301: Intro Microbiology	3	BS 161, CEM 143	FS, SS, US
MMG 302: Intro Lab for Allied Health Microbio	1	MMG 201 or 301	FS, SS, US
MMG 425: Microbial Ecology	3	MMG 301 recommended	SS
MMG 445: Microbial Biotech	3	MMG 301, WRA 101	FS, US

STT 464: Stats for biologists	3	MTH 103, previous stats course	FS
ENE 280: Principles of Environmental Engineering Science	3	CEM 141, MTH 132	FS, SS
BE 429: Fundamentals of Food Engineering	3	FSC 325, MTH 132, PHY 231 Recommended FSC 211	SS
CEM 262: Quantitative Analysis	3	CEM 142, 162	FS, SS, US
CEM 311: Inorganic Chem	3	CEM 142	SS
CEM 333: Instrumental Methods and Applications	3	CEM 262, CEM 143	SS
MSE 250: Materials Science and Engineering	3	CEM 141	FS, SS, US
MSE 260: Electronic, Magnetic, Thermal, and Optical Properties of Materials	3	MSE 250, PHY 184	SS
PHM 211: Pharmacology and Toxicology in Society	2	None **NOTE is only 2 credits, need NINE total credits**	SS, US
PHM 351: Fundamentals of Drug Safety	2	BS 161, juniors or seniors **NOTE is only 2 credits, need NINE total credits**	SS
MTH 234: Multivariable Calc	4	MTh 133	FS, SS, US
MTh 235: Differential Equations	3	MTH 234	FS, SS, US
MTH 299: Transitions	4	MTH 132, MTH 133 or concurrently	FS, SS, US
MTH 309: Linear Algebra	3	MTH 133, MTH 299	FS, SS, US

**Students will need to take free electives to get to the degree requirement of 120 total credits. This will equal approximately 10-12 credits, depending on each individual student's previous coursework. These credits can be used to meet prereqs for courses in their concentration, a minor, additional packaging electives or internships, or on any other coursework a student wishes to explore*