

RECOMMENDED ASSOCIATE OF SCIENCE (AS) CURRICULUM IN PHYSICS (CALCULUS READY) FOR KCTCS STUDENTS

61 Credit Hours

A. General Education Core - 38 credit hours

Written Communications - 6 credit hours

ENG 101 (3)

ENG 102 (3)

Oral Communications - 3 credit hours

COM 181 (3)

Arts and Humanities - 6 credit hours

Humanities (3)

PHI 100 (3)

Heritage (3)

HIS 101 (3) or HIS 102 (3)

Quantitative Reasoning - 10 credit hours

MAT 175 (5)

MAT 185 (5)

Natural Sciences - 7 credit hours

One science course must include a laboratory experience.

AST 101 (3) and AST 195 (1)

AST 192 (3)

Social and Behavioral Sciences - 6 credit hours

Two disciplines must be represented and different from those in the Arts and Humanities category.

REL 130 (3)

SOC 101 (3) or POL 101 (3) or GEO 152 (3)

B. Quantitative Reasoning and/or Natural Sciences - 7 credit hours

MAT 275 (4)

STA 220 (3)

C. Electives - 16 credit hours

PHY 231 (4) and PHY 241 (1)

PHY 232 (4) and PHY 242 (1)

CIT 105 (3) [Required- KCTCS Digital Literacy Success Course]

FYE 105 (3) [Required- KCTCS College Success Course]

**Early-Start MAT Physics Degree Program (Calculus Ready) for KCTCS Transfer Students
(Undergraduate Degree in Physics-120 Credit Hours and with MAT Degree-144 Credit Hours)**

Courses Taken at KCTCS Community Colleges		Courses Transferred to Bellarmine	
		BU 100 (Waived for transfer students)	
		IDC 101 (Waived for transfer students)	
FYE 105	3	ELECTIVE	3
ENG 102	3	ELECTIVE	3
CIT 105	3	ELECTIVE	3
COM 181	3	ELECTIVE (COMM 103)	3
ENG 101	3	ENGL 101	3
HIS 101 or 102	3	HIST 116 or 117	3
PHI 100	3	PHIL 101	3
REL 130	3	THEO 200	3
SOC 101 or POL 101 or GEO 152	3	Gen Ed Social Science	3
AST 101 (LEC) and AST 195 (LAB)	4	PHYS 105	3
AST 192	3	PHYS 106	3
PHY 231 (LEC) and PHY 241 (LAB)	5	PHYS 205	4
PHY 232 (LEC) and PHY 242(LAB)	5	PHYS 206	4
MAT 175	5	MATH 117	4
MAT 185	5	MATH 118	4
MAT 275	4	MATH 216	3
STA 220	3	MATH 205	4
Total	61		56

THIRD YEAR

<i>Fall</i>		<i>Spring</i>	
PHYS 307	4	PHYS 405	3
PHYS 408	3	PHYS 406	3
PHYS 404	3	ENGL 200 level	3
MATH 301	3	Gen Ed THEO Elective	3
CS 150	3	Fine Arts	3
Total	16		15

FOURTH YEAR

<i>Fall</i>		<i>Spring</i>	
PHYS 410	3	PHYS 440	3
PHIL 301	3	PHYS 450	3
Foreign Lang. 101	3	IDC 401	3
MAT 502	3	Foreign Lang. 102	3
MAT 507 or MAT 505	3	MAT 605	3
		MAT 610	3
Total	15		18

FIFTH YEAR

Summer

MAT 600			3
MAT 614			3
MAT 615			3
Total			9
<i>Fall</i>		<i>Spring</i>	
MAT 545	3	MAT 648 or MAT 644	3
MAT 596 or MAT 598	3	MAT 649 or MAT 643	3
MAT 509	3		
Total	9		6

**RECOMMENDED ASSOCIATE OF SCIENCE (AS) CURRICULUM IN PHYSICS (NOT-CALCULUS READY) FOR
KCTCS STUDENTS**

63 Credit Hours

A. General Education Core - 38 credit hours

Written Communications - 6 credit hours

ENG 101 (3)

ENG 102 (3)

Oral Communications - 3 credit hours

COM 181 (3)

Arts and Humanities - 6 credit hours

Humanities (3)

PHI 100 (3)

Heritage (3)

HIS 101 (3) or HIS 102 (3)

Quantitative Reasoning - 10 credit hours

MAT 171 (5)

MAT 175 (5)

Natural Sciences - 7 credit hours

One science course must include a laboratory experience.

AST 101 (3) and AST 195 (1)

AST 192 (3)

Social and Behavioral Sciences - 6 credit hours

Two disciplines must be represented and different from those in the Arts and Humanities category.

REL 130 (3)

SOC 101 (3) or POL 101 (3) or GEO 152 (3)

B. Quantitative Reasoning and/or Natural Sciences - 9 credit hours

MAT 185 (5)

MAT 275 (3)

C. Electives - 16 credit hours

PHY 231 (4) and PHY 241 (1)

PHY 232 (4) and PHY 242 (1)

CIT 105 (3) [Required- KCTCS Digital Literacy Success Course]

FYE 105 (3) [Required- KCTCS College Success Course]

**Early-Start MAT Physics Degree Program (Not-Calculus Ready) for KCTCS Transfer Students
(Undergraduate Degree in Physics-123 Credit Hours and with MAT Degree-147 Credit Hours)**

Courses Taken at KCTCS Community Colleges		Courses Transferred to Bellarmine	
		BU 100 (Automatically waived for transfer students)	
		IDC 101 (Automatically waived for transfer students)	
FYE 105	3	ELECTIVE	3
ENG 102	3	ELECTIVE	3
CIT 105	3	ELECTIVE	3
COM 181	3	ELECTIVE (COMM 103)	3
ENG 101	3	ENGL 101	3
HIS 101 or 102	3	HIST 116 or 117	3
PHI 100	3	PHIL 101	3
REL 130	3	THEO 200	3
SOC 101 or POL 101 or GEO 152	3	Social Science	3
AST 101 (LEC) and 195 (LAB)	4	PHYS 105	3
AST 192	3	PHYS 106	3
PHY 231 (LEC) and 241 (LAB)	5	PHYS 205	4
PHY 232 (LEC) and 242 (LAB)	5	PHYS 206	4
MAT 171	5	MATH 116	3
MAT 175	5	MATH 117	4
MAT 185	5	MATH 118	4
MAT 275	4	MATH 216	3
Total	63		55

THIRD YEAR

<i>Fall</i>		<i>Spring</i>	
PHYS 307	4	PHYS 405	3
PHYS 408	3	PHYS 406	3
PHYS 404	3	ENGL 200 level	3
MATH 301	3	Gen Ed THEO Elective	3
CS 150	3	Fine Arts	3
Total	16		15

FOURTH YEAR

<i>Fall</i>		<i>Spring</i>	
PHYS 410	3	PHYS 440	3
PHIL 301	3	PHYS 450	3
Foreign Lang. 101	3	IDC 401	3
MATH 205	4	Foreign Lang. 102	3
MAT 502	3	MAT 605	3
MAT 507 or MAT 505	3	MAT 610	3
Total	19		18

FIFTH YEAR

Summer

MAT 600			3
MAT 614			3
MAT 615			3
Total			9
<i>Fall</i>		<i>Spring</i>	
MAT 545	3	MAT 648 or MAT 644	3
MAT 596 or MAT 598	3	MAT 649 or MAT 643	3
MAT 509	3		
Total	9		6