

**Critical requirements are boldface in shaded areas**

Course Subject and Title	Credit Hours	Upper Division	Min. Grade	Important Notes
<b>Semester One: [14-15 Credit Hours]</b>				
MATH 12002 Analytic Geometry and Calculus I	5			Fulfills LER Mathematics and Critical Reasoning; enrollment based on placement tests; prerequisites: MATH 11010 and 11022 may be bypassed with sufficient background
PHY 12000 Introductory Physics Seminar	1			
ENG 11011 College Writing I	3			Enrollment based on placement tests; fulfills LER Composition
US 10097 Destination Kent State: FYE	1			Not required for transfer students with 25 credits
Foreign Language (Elementary I)	4-5			
<b>Semester Two: [14-15 Credit Hours]</b>				
MATH 12003 Analytic Geometry and Calculus II	5			
PHY 23101 General University Physics I	5			
Foreign Language (Elementary II)	4-5			
<b>Semester Three: [15-16 Credit Hours]</b>				
MATH 32051 Mathematical Methods in Physical Sciences I	4	■		
PHY 23102 General University Physics II	5			
Foreign Language (Intermediate I)	3-4			
LER Basic Sciences	3			Visit <a href="http://www.kent.edu/catalog">www.kent.edu/catalog</a> and search "LER" for course list
<b>Semester Four: [16-17 Credit Hours]</b>				
MATH 32052 Mathematical Methods in the Physical Sciences II	4	■		
PHY 36001 Introductory Modern Physics	3	■		
ENG 21011 College Writing II	3			Fulfills LER Composition
Foreign Language (Intermediate II)	3-4			
LER Basic Sciences	3			Visit <a href="http://www.kent.edu/catalog">www.kent.edu/catalog</a> and search "LER" for course list
<b>Semester Five: [15 Credit Hours]</b>				
PHY 30020 Intermediate Physics Laboratory	2	■	C	Fulfills writing-intensive course requirement
PHY 35101 Classical Mechanics	4	■		
PHY 36002 Applications of Modern Physics	3	■		
LER Humanities or Fine Arts	3			Should fulfill diversity requirement; visit <a href="http://www.kent.edu/catalog">www.kent.edu/catalog</a> and search "LER" and "diversity" for course lists
General Elective (upper division)	3	■		
<b>Semester Six: [15-16 Credit Hours]</b>				
LER Basic Sciences	2-3			Visit <a href="http://www.kent.edu/catalog">www.kent.edu/catalog</a> and search "LER" for course list
LER Basic Sciences Laboratory	1			
LER Humanities	3			Should fulfill diversity requirement; visit <a href="http://www.kent.edu/catalog">www.kent.edu/catalog</a> and search "LER" and "diversity" for course lists
LER Social Sciences	3			
PHY Elective (upper division)	3	■		See note on page 2
General Elective (upper division)	3	■		

Course Subject and Title	Credit Hours	Upper Division	Min. Grade	Important Notes
<b>Semester Seven: [15 Credit Hours]</b>				
PHY 40020 Advanced Physics Laboratory	2	■	C	Fulfills writing-intensive course requirement
PHY 45201 Electromagnetic Theory	4	■		
LER Additional	3			Should fulfill diversity requirement if not satisfied earlier; visit <a href="http://www.kent.edu/catalog">www.kent.edu/catalog</a> and search "LER" and "diversity" for course lists
LER Social Sciences	3			
General Elective (upper division)	3	■		
<b>Semester Eight: [14-17 Credit Hours]</b>				
LER Additional	3			Should fulfill diversity requirement if not satisfied earlier; visit <a href="http://www.kent.edu/catalog">www.kent.edu/catalog</a> and search "LER" and "diversity" for course lists
LER Fine Arts	3			
LER Social Sciences	3			
PHY Electives (upper division)	5	■		See note below
General Elective (lower or upper division)	0-3	■		Number of credits required depends on meeting minimum 121 credit hours and minimum 42 upper-division credit hours

### Graduation Requirements Summary

Total Hours	Upper-Division Hours	Liberal Education Requirements Hours	Diversity Course Global / Domestic	Writing-Intensive	Minimum	
					Major GPA	Overall GPA
121	42	57	LER or General Electives	PHY 30020 or PHY 40020	2.0	2.0

**Note:** **Physic electives (8 credit hours):** with advisor's permission, students may replace 3 credit hours of physics electives with PHIL 41035 Philosophy of Science or ENG 20002 Introduction to Technical Writing.

#### Additional Notes for the Physics major:

- The following courses **may not** count towards the major:

PHY 11030 Seven Ideas that Shook the Universe	3	PHY 21430 Frontiers in Astronomy	3
PHY 21040 Physics in The Entertainment and the Arts	3	PHY 24001 Astronomy	3
PHY 21041 Physics in The Entertainment and the Arts Laboratory	1		

- Credit is not granted for both the PHY 13001/PHY 13002 and the PHY 23101/PHY 23102 series.

#### Liberal Education Requirements (LER)

Students must complete a minimum 36 credit hours of Liberal Education Requirements. Colleges or degree programs may specify certain courses to fulfill the requirements. Courses in the students' major field will not count toward the completion of any LER. Honors equivalents shall satisfy the LER. None of the courses on the LER list may be taken with a pass/fail grade.

#### Diversity Course Requirement

Students must complete a two-course diversity requirement, consisting of one with a domestic focus and one with a global focus. One course must be come from the LER and cannot be in the student's major. The second course may be taken as a second LER; or within a major or minor; or as a general elective; or, with dean's approval, by completing one semester of study in another country.

#### Writing-Intensive Course Requirement

Students must complete a one-course writing-intensive requirement in their major and earn minimum C (2.00) grade.

#### Upper-Division Requirement

In general, baccalaureate programs require the successful completion of at least 39 upper-division (numbered 30000 to 49999) credit hours of coursework. Programs in the College of Arts and Sciences require a minimum of 42 hours of upper-division coursework.