

Preliminary Astronautics Class Schedule (as of Mar 2022)

(subject to change – always check with *ASTE Student Adviser*)

Required Courses				2022	2023	2023	2024	2024	2025	2026	2026
				Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
ASTE 520	Spacecraft Design	1	D R	▼		▼		▼		▼	
ASTE 535	Space Environment and Spacecraft Interactions	2	D R	▼	▼	▼	▼	▼	▼	▼	▼
ASTE 580	Orbital Mechanics I	2	D R	▼	▼	▼	▼	▼	▼	▼	▼
	Orbital Mechanics I		D R	also offered in summers -- see next page							
ASTE 470*	Spacecraft Propulsion	1	D R	▼			see next page				
ASTE 575*	Rocket and SC Propulsion	1	D R		▼		▼		▼		▼
Elective Courses											
ASTE 501ab	Physical Gas Dynamics I, II	1r	N C			a-?		a-?		a-?	
ASTE 505ab	Plasma Dynamics I, II	1#	N C	a		a		a		a	
ASTE 523	Design Low Cost Sp Missions	#	D C		▼				▼		
ASTE 524	Human Spaceflight	1	D C	▼		▼		▼		▼	
ASTE 527	Space Studio Architecting	1	D C	▼		▼		▼		▼	
ASTE 528	Reliability of Space Systems	#	D C			▼				▼	
ASTE 529	Safety Space Sys. & Missions	#	D C		▼				▼		
ASTE 546	Comp. Plasma Dynamics	#	N E		▼				▼		
ASTE 552	Spacecraft Thermal Control	#	D C			▼				▼	
ASTE 553	Sys Remote Sensing Space	#	D C	▼				▼			
ASTE 554	Spacecraft Sensors	#	D C			▼				▼	
ASTE 555	Space Cryogenic Sys & Applic	#	D C	see next page							
ASTE 556	SC Structural Dynamics	#	D C	▼				▼			
ASTE 557	SC Structural Materials	#	D C			▼					
ASTE 561	Human Factors Spacecraft Ops	1	D C	▼		▼		▼		▼	
ASTE 562	Spacecraft Life Support Sys	1	D C		▼		▼		▼		▼
ASTE 566	Ground Comm Satellite Ops	1	N C	▼	▼	▼	▼	▼	▼	▼	▼
ASTE 570	Liquid Rocket Propulsion	1	D C		▼		▼		▼		▼
ASTE 571	Solid Rocket Propulsion	#	D C	▼				▼			
ASTE 572	Advanced SC Propulsion	1	D C		▼		▼		▼		▼
ASTE 574	Space Launch Vehicle Design	1	D C		▼		▼		▼		▼
ASTE 577	Entry & Landing Planet. Sys.	1	D C	▼		▼		▼		▼	
ASTE 581	Orbital Mechanics II	1	D C		▼		▼		▼		▼
ASTE 583	Space Navigation	#	D C			▼				▼	
ASTE 584	SC Power Systems	1	D C		▼		▼		▼		▼
ASTE 585	SC Attitude Control	1	D C	offered in summers -- see next page							
ASTE 586	SC Attitude Dynamics	#	D C				▼				▼
ASTE 589	Solar System Navigation	#	D C	▼				▼			
ASTE 599	Safety of Space Operations	#	D E				▼				▼
ASTE 599	to be announced		E								
ASTE 683	Adv. Spacecraft Navigation	1r	D E		▼				▼		

*ASTE 575 and ASTE 575 --- see the next page

Required course in spacecraft propulsion

The required ASTE-470 is not available for graduate credit anymore.

It has been replaced by ASTE-575 which is required for MS ASTE and is identical to ASTE-470. (ASTE-575 duplicates the credit for ASTE-470).

Graduate students pursuing MS ASTE are required from now on to take ASTE-575.

In Fall 2022, ASTE-470 will be open to undergraduate students only. For Master's students, special permission is needed to take ASTE-470 in Fall 2022 when it is offered for the last time.

Courses in summer

Required Courses				2022 summer	2023 summer	2024 summer	2025 summer
ASTE 580	Orbital Mechanics I	2	D R	▼	▼	▼	▼
Elective Courses							
ASTE 585	Spacecraft Attitude Control	1	D C	▼	▼	▼	▼

Courses listed but not offered (due to availability of instructors)

Elective Courses												
ASTE 501b	Physical Gas Dynamics II	Ir	N C									
ASTE 555	Space Cryogenic Sys & Applic	#	D C									
ASTE 584	SC Power Systems	1	D C	We plan to offer ASTE-584 annually from spring 2023								

Table notation

SC = spacecraft

2 = course offered in both fall and spring each year

1 = course offered each year

= course offered every second year

Ir = course offered irregularly

▼ = planned (subject to School approval)

R = required MS ASTE

C = core elective MS ASTE

E = technical elective

D = webcast through DEN

N = on campus; not available through DEN

? = uncertain, check with ASTE Student Adviser

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