

Joint Dual Degree Programs

- 3+4 B.S. chemistry (NCCU)/PharmD (Howard University)

In the 3+4 B.S. chemistry (NCCU)/PharmD (Howard University) joint degree program, students spend their first three years at NCCU completing most of the requirements for their B.S. degree in chemistry and they spend four years at Howard University to complete their final year for the B.S. degree and the first year of their PharmD degree. The second through fourth years at Howard University will be used to complete their PharmD degree.

Four-Year Curriculum Plan in: BACHELOR OF SCIENCE DEGREE IN CHEMISTRY FOUR-YEAR PLAN – NCCU Chemistry BS/Howard University PharmD Dual Degree Program

Freshman Year		Fall		Spring			
Course Prefix/Number		Course Title	Credit	Course Prefix/Number		Course Title	Credit
*CHEM	1100	Gen. Chem. I	4	+CHEM	1200	Gen. Chem. II	4
=*MATH	2010	Calc & Anal Geom. I	4	=*MATH	2020	Calc & Anal Geom. II	4
*UNIV	1100	First year seminar	2	*ENG	1110	English Composition I	3
*BIOL	1202	Prin of Biol. Molecules and cells	4	&BIOL	2200	Molecular Biology of Cells	3
*PHIL	2210	Ethics (HUM GEC Req)	3	*HEDU	1531	Health	2
Total			17	Total			16

Sophomore Year		Fall		Spring			
Course Prefix/Number		Course Title	Credit	Course Prefix/Number		Course Title	Credit
+CHEM	3100	Org. Chem. I	3	+CHEM	3120	Org. Chem. II	3
+CHEM	3330	Org. Chem. Lab I	1	+CHEM	3340	Org. Chem. Lab. II	1
*SOSC	-	GEC Requirement	3	*MSCM	1250	Elements of Speech (SI)	3
=PHYS	2110	Gen. Phys. I	4	=PHYS	2120	Gen. Phys. II	4
*ENG	1210	English Composition II	3	&BIOL	3200	General Microbiology	4
*HIST	1320	World Societies	3				
Total			17	Total			15

Junior Year		Fall		Spring			
Course Prefix/Number		Course Title	Credit	Course Prefix/Number		Course Title	Credit
+CHEM	4010	Phys. Chem. I	4	+CHEM	4400	Instrumental Analysis	4
+CHEM	3200	Inorganic Chemistry	4	+CHEM	4020	Phys. Chem. II	4
+CHEM	2020	Quantitative Analysis	4	*PEDU	1541	Fitness	2
+CHEM	4500	Biochemistry I	3	*MFL		Mod Foreign Lang. II	3
+CHEM	4520	Biochemistry Lab.	1	*HUM	2410/ 2420	Arts & Humanities I or II	3
Total			16	Total			16

Senior Year		Fall		Spring			
Course Prefix/Number		Course Title	Credit	Course Prefix/Number		Course Title	Credit
+86296-317		Struc. Func. in Therap.	2	&13636-307		Pharmaceutics	4
&89243-312		Pharmacol. Therap. I	3	&13637-308		Pharmacol. Therap. II	3
89359-323		Pharm. Calc. I	2	+13640-311		Pharm Care II or Pharmacy Care	3
83602-306		Drug Inform.	3				
+89242-315		Pharm. Chemistry I	3				
Total			13	Total			10

TOTAL MINIMUM CREDIT HOURS: 120 semester hours (97 hours from NCCU; Transfer 23 hours from Howard)

Distribution of Hours *Core Curriculum Courses/GEC requirements – 46

+ Required Chemistry Courses for B.S. degree in Chemistry (Pre-Med, Pre-Dent., Pre-Pharm) – 43

& Advanced Biology Courses and Advanced Chemistry Electives for B.S. degree in Chemistry
(Pre-Med, Pre-Dent, Pre-Pharm) –21

Chemistry/Biology and/or General Electives 6

= Required cognitive course for B.S. degree in Chemistry -8

NCCU Chemistry BS/Howard University PharmD Dual Degree Program Course Substitutions

Howard University Courses		NCCU Courses		
Struc. Func. in Therap.	2	CEHM 4920 Senior Honors Seminar	2	Junior Year
Pharmacol. Therap. I	3	Advanced Elective CHEM	3	Senior Year
Pharm. Calc. I	2	CHEM 4900 Appl. Maths	2	Junior Year
Pharm. Chemistry I	3	CHEM 4700 Research	3	Senior Year
Pharmaceutics	4	BIOL 3100 Genetics	4	Senior Year
Pharmacol. Therap. II	3	Advanced Elective CHEM	3	Senior Year
Pharm Care II or Pharmacy Care	3	CHEM 4800 Chem. Res. Literature (WI)	3	Junior Year
Drug Inform.	3	CHEM Elective	3	Senior Year