Interest in Astrophysics and Quantum Technology Specializations – City Tech, Physics Department

The Physics Department is considering opening two new specializations, ***Astronomy*** *and* ***Quantum Technology*** *in its Bachelor of Science program. Note that the total number of courses/credits required would remain the same.*

- ***Astronomy*** *specialization is a pathway to master's and PhD degree in astronomy/astrophysics related fields. The offered courses in the major would include:*
  - ***Astrophysics*** *(PHYS 2700) - intro to modern astrophysics, planets, stars and galaxies*
  - ***Cosmology*** *(PHYS 3700) - evolution of the Universe, its expansion and dark matter*
  - ***Machine Learning for Physics and Astronomy*** *(PHYS 3600) – Artificial Intelligence in physics and astronomy*

- ***Quantum Technology*** *specialization prepares students for jobs in the semiconductor chip manufacturing industry companies such as Intel, Global Foundries, Samsung, and Micron. The courses include:*
  - ***Semiconductor World*** *(PHYS 1050)- concepts of semiconductor technologies and devices.*
  - ***Principles of Experimental Design*** *(PHYS 2501-2502) – prepares to work in industrial and/or academic lab.*
  - ***Semiconductor Physics*** *(PHYS 4500)– physics of semiconductors and devices, microchips, lasers and so on.*

Please help us assess your interest for this opportunity by answering the following questions:

1. What is your current major? _____

2. Would you be interested in adding a Physics Minor with an Astrophysics specialization to your current major?

   [ ] Yes [ ] Maybe [ ] No

3. Would you be interested in adding a Physics Minor with a Quantum Technology specialization to your major?

   [ ] Yes [ ] Maybe [ ] No

4. Would you be possibly interested in enrolling/transferring to a Physics Bachelor of Science Program Major with an Astronomy Specialization?

   [ ] Yes [ ] Maybe [ ] No

5. Would you be possibly interested in enrolling/transferring to a Physics Bachelor of Science Program Major with a Quantum Technology Specialization?

   [ ] Yes [ ] Maybe [ ] No

6. Would you be interested in taking some of the courses listed above as electives courses?

   [ ] Yes [ ] Maybe [ ] No

Thank you!
The Physics Department

RESULTS

	Number of students surveyed	Minor Astrophysics (Question 2)	Minor Quantum Tech (Question 3)	Major Astrophysics (Question 4)	Major Quantum Tech (Question 5)	Elective Courses (Question 6)
PHYS 1441	40	Y:11 M:15 N: 14	Y: 13 M: 16 N:11	Y: 3 M: 15 N:22	Y:7 M:12 N:21	Y:26 M:6 N:8
PHYS 1442	24	Y:4 M:8 N:	Y:6 M:6 N:	Y:2 M:5 N:	Y:2 M:6 N:	Y:16 M:6 N:2
PHYS 1117	13	Y:2 M:1 N:10	Y:4 M:4 N:5	Y:3 M:1 N:9	Y:1 M:5 N:7	Y:4 M:5 N:4
PHYS 1434	42	Y:8 M:19 N:15	Y:11 M:17 N:14	Y:2 M:14 N:26	Y:5 M:15 N:22	Y:29 M:9 N:4
PHYS 1433	208	Y:19 M:72 N:117	Y:49 M:67 N:92	Y:10 M:32 N:166	Y:18 M:46 N:144	Y:68 M:77 N:63