The IOP in Scottish carried out a survey of students in first year at university who are taking physics. The survey is designed to look at factors which influence students in making their decision to take the subject. 100 students at universities across Scotland completed the survey during 2014. A summary of their responses is given below.

The main findings from the survey were:

- Around 42% of students undertook practical classes at least once a week
- 26% of experiments were carried out by the students, compared to 25% in 2012.
- 6% had never carried out an experiment compared to 8% in 2012;
- University open days were extremely or very influential in helping students choose their course in 34% of cases of those who attended an open day, although 31% did not take part in an open day
- 21% were extremely or very influenced by workshops/experiments/lectures outside school
- There were a wide variety of factors which influenced students’ choice to study physics, although guidance/careers advice scored the lowest.
- Ability in maths, a desire to understand how the world works and an interest in fundamental questions were deemed to be the biggest influences in choosing to study physics
- Quantum/particle physics sparked an interest in 31% of students. This was an increase of 14% on the results from the survey taken in 2011.
- 92% of students believed that physics would be an advantage in finding a job
- 28% of students wished to find a job in researching physics, but nearly 30% or students were not sure of their career direction.
- 27% of respondents to the survey were female
When you studied physics at school, what was the highest qualification you gained?

- Standard Grade
- Intermediate 1
- Intermediate 2
- Higher
- Advanced Higher
- AS Level
- A Level

How often did you have practical physics classes in school?

- Teacher demonstrations
- Experiments carried out by students

- At least once a week
- At least once a month
- At least once every two months
- At least once every term
How influential were the following events in helping you choose your present course? If you did not attend/participate in an event, please tick did not participate.

- University open day (chosen university)
- University open day (other universities)
- Experiments/workshops/lectures outside school
- Work experience/placement in industry
- Project entered in competition
- Nuffield Bursary scheme

How influential were the following factors in helping you to make your choice to study physics?

- Ability in physics/maths
- Desire to understand how the world works
- Interest in fundamental/big questions in physics
- Interest in new and emerging technologies
- School physics teacher
- Guidance counsellor/career teacher
- Previous experience of subject in school
- School practicals/experiments
- Friends
- Family
- University staff
- Career possibilities
- Books/films/tv shows
- Internet information on physics and careers
Was there any physics topic you studied in school which particularly sparked your interest in further study?

- Astronomy/space
- Cosmology
- Electricity/Magnetism
- Health physics
- Mechanics
- Nuclear
- Optics
- Particle/quantum
- Relativity
- No

Do you believe that a degree in physics will be an advantage in finding a job?

- Yes
- No
- Don't know
In which career direction do you think studying physics will take you?

- Not sure: 29%
- Energy industry: 16%
- Engineering industry (including research): 10%
- Research at a university: 17%
- Research at another research establishment: 12%
- Teaching at a university: 4%
- Teaching in schools: 6%
- Not related to physics: 4%
- Medical physics: 1%
- Meteorology/earth sciences: 1%