# See the source image**Job title: Cartographer**

|  |  |
| --- | --- |
| **Job title: Cartographers**  | Cartographers collect information about the geography of an area to design and produce maps, charts and plans. |
| **Entry requirements:**  | **University:**You can take a degree in:* geography
* geographical information systems (GIS)
* land surveying
* earth sciences
* oceanography

Employers may also accept degrees in other subjects like computer science, software engineering or graphic design.A postgraduate qualification may help you to find work in a specialist field of cartography like GIS.You'll usually need:* 2 to 3 A levels for a degree
* a degree in a relevant subject for postgraduate study

**Apprenticeships:**You could complete a geospatial survey technician advanced apprenticeship, or geospatial mapping degree apprenticeship.You'll usually need:* 4 or 5 GCSEs at grades 9 to 4 (A\* to C) and A levels, or equivalent, for a higher or degree apprenticeship

**Work:**You may be able to get into this job by starting as a trainee cartographic technician and working your way up.Employers may look for an apprenticeship in geospatial surveying, or A levels or equivalent, in geography, art and design, mathematics or computing.**Other Routes:**If you want to work as a cartographer in the armed forces, you can apply to the [British army](https://apply.army.mod.uk/roles/royal-engineers/geographic-technician) as a geographic technician, or the [Royal Air Force](https://www.raf.mod.uk/recruitment/roles/roles-finder/air-operations-support/air-cartographer/) as an air cartographer.After you leave the services, you could use your experience to find work in commercial cartography and mapping. |
| **Skills required:**  | You'll need:* knowledge of geography
* maths knowledge
* to be thorough and pay attention to detail
* analytical thinking skills
* excellent written communication skills
* excellent verbal communication skills
* design skills and knowledge
* the ability to work well with others
* to be able to use a computer and the main software packages confidently
 |
| **What you'll do:**  | In this role you could be :* using desktop publishing and specialist computer software
* designing digital or paper based maps
* checking maps and charts are accurate and to scale
* editing maps, adding and removing new roads, structures or landmarks
* collecting and analysing data from remote sensors on satellites and planes
* using GIS to model and analyse landscape features
* plotting the heights and positions of geographical features from aerial photographs
* carrying out topographic surveys of the land and hydrographic surveys of the sea and coastal areas
 |
| **What you’ll earn:**  | £18,000 Starter *to* £45,000 Experienced |
| **Working hours, patterns and environment:** | * 39-41 hours per week
* Evenings occasionally
* You could work in a laboratory.
* Your working environment may be emotionally demanding.
 |
| **Career path and progression:** | With experience you could become a senior cartographer and manage mapping projects and staff. If you specialise in working with GIS, you could apply for [Chartered Geographer (GIS) status](http://www.agi.org.uk/). You could also work on a freelance basis, but you’ll need your own mapping equipment. |