

# So...You Have a Passion for Brewing?!

The current overall beer market in the US is right at 101 billion dollars (that's approximately 203,576,450 barrels, and one barrel = 31 gallons). Craft breweries own 14.3 billion of U.S. market sales. That *sounds* like there should be a number of jobs out there. This fact sheet is designed to help you give consideration to working in the brewing industry, most specifically as a brewer.

## Required Skills for Working in the Brewing Industry

- **Solid organizational and planning skills:** Brewmasters must have the ability to organize and plan ahead in order to manage and oversee the brewery and the brewing process.
- **Strong interpersonal skills:** Brewmasters generally manage a large staff, ranging from six to 50 brewers, as well as other employees. It is important to be able to effectively communicate with the staff to make sure the brewery runs smoothly.
- **Education and Training:** College degree in science required, or certified technical training.

## Brewing Related Jobs

**Brewery Cellar Worker (often called cellar rats)** tend equipment that cools wort and beer and adds yeast to wort to produce beer. Starts pumps and turns valves to control flow of refrigerant through cooler coils, to regulate flow of hot wort from tank through cooler into starting tank, and to admit specified amounts of air into wort.

**Technical Brewers** are responsible for managing the process of brewing and packaging beer. This includes the management of raw materials, people and processes in the production plant. In smaller breweries they may oversee all areas of production and be responsible for maintaining the machinery.

**Brewing Engineer** provides the engineering expertise to maintain, modify, design and install brewing, beer processing and high speed packaging plant. Also manages services, water, steam, electricity, and is responsible for energy management.

**Research Brewer** is a high-level technical brewing position and is responsible for all aspects of the daily management and operation of a Pilot Research Brewery.

**Head Brewer/Brewmaster** has extensive experience (7-10 years minimum); Brewers develop beer recipes and oversee a brewery's production including hiring/firing employees, forecasting/planning, logistics, and budgeting. Requires a chemistry, microbiology and engineering background.

**Brewer Assistant** is responsible for yeast handling, filtration of product, cleaning of production tanks. The assistant learns the brewer's/operations manager's job and can substitute for them when necessary.

**Operations Manager** oversees entire beer-making process from mash tank to bottling.

*Cenosillicaphobia is listed as the "fear of an empty glass."*



## How Do I Become a Brewer?

### Degree Programs (4 Year B.S. Degree)

**Oregon State University -**  
*Major in Food Science, Option in Fermentation Science*

**UC Davis**

**Appalachian State University**

**Advantage of degree program over certificate program:** Broader base of knowledge is achieved through a degree program which opens up more opportunities for different jobs within the brewing (and other) industries.

### Non-Degree Technical Programs\*

*(usually 8-12 week sessions; typical range of cost \$14K-20K)*

**American Brewers Guild**

**Siebel Institute - World Brewing Academy**  
*(schools in Chicago, Montreal, Munich)*

**Master Brewers Program - University of California at Davis:** UC Davis Extension offers classes in the science of brewing

**Master Brewers Association of the Americas**

**VLB Berlin (Germany)**

*Certified brewmaster program*

**Doemens (Germany)**

*\*Some programs are approved for V.A. educational benefits*

### Brewing Certificate Program

**Central Washington University**

**Essential educational background for all programs:** Calculus, biologic sciences (microbiology, biochemistry, cell physiology), organic and analytical chemistry, physics (heat, mechanics, process control), engineering courses (mechanical and chemical)

### Salary Tidbits...

- The smaller the brewery, the closer to the low end of the salary range; the larger the brewery, the closer to the high end.
- Brewpubs (including a restaurant) tend to pay better than microbreweries. (Overall range \$47-53K nationally)
- Microbrewing jobs are harder to get on the coasts than inland.
- Most positions are salaried based on 40 hr work week, but in reality it is most often 40+ hours per week.
- Pacific Northwest high production brewing, average \$15-17 / hr.

## What Can I Expect to Earn?

Position	Avg. National Salary	Salary Range Nationally
Full-time Head Brewer <i>(*All brewpub overall avg.)</i>	\$48,279	24-90K
Full-time Assistant Brewer <i>(*All brewpub overall avg.)</i>	\$27,249	14-36K
<b>* BrewPub Salaries typically includes a restaurant</b>		
<b>PACKAGING BREWERIES</b>		
Brewmaster/Brewery Operations	Avg. National Salary	Salary Range Nationally
5-10K Barrel Production	\$46,133	27-75K
> 5000 Barrels	\$83,926	42-112K
All craft/packaging brewery overall average	\$53,712	12-112K
Head Brewer	Avg. National Salary	Salary Range Nationally
5-10K Barrel Production	\$40,700	26-65K
> 5000 Barrels	\$48,142	25-57K
All packaging brewery overall average	\$41,026	22-65K
Cellar Manager	Avg. National Salary	Salary Range Nationally
5-10K Barrel Production	\$30,125	24-34K
> 5000 Barrels	\$46,720	23-57K
All packaging brewery overall average	\$32,513	15-57K
Packaging Manager	Avg. National Salary	Salary Range Nationally
5-10K Barrel Production	\$28,625	21-35K
> 5000 Barrels	\$49,840	23-69K
All packaging brewery overall average	\$35,091	19-69K

Average Full-time Brewmaster Salaries by Region						
Production	Midwest	Mtn West	NE	Pac	PacNW	South
1-5,000 Barrels	\$43,125	\$34,000	\$35,500	\$46,500	\$52,800	\$36,000
5-10K Barrels	\$32,000	\$58,500				
> 5,000 Barrels	\$90,140		\$112,000		\$56,250	
All packaging brewery overall avg.	\$65,5888	\$47,444	\$61,000	\$60,750	\$54,525	\$39,000

### Thinking of owning your own brewery?

Interest in craft brewing is high because it holds public appeal and unique flavors, blends and styles; however, it's very important to have business training in addition to experience and brewing knowledge.

*He was a wise man who invented beer.*

*Plato*

*There can't be good living where there is not good drinking.*  
**Benjamin Franklin**