

DATA CENTER OPERATIONS FOUNDATIONS, BASIC CERTIFICATE



College(s): DA

Program Code: 0533

The Basic Certificate in Data Center Operations Foundations prepares students for entry level employment supporting the mechanical and electrical systems used in data center facilities. Students develop foundational skills in mechanical mechanisms, fluid power, motors, and electrical controls through hands on coursework aligned with industry practices. This certificate is designed for individuals beginning their training in mission critical facility environments and serves as the starting point for advancement into more specialized data center operations roles.

Program Requirements

Code	Title	Hours
Required Program Core		
AIR CON 159	Industrial Cooling and Refrigeration	3
AIR CON 204	Advanced Control Systems	3
CIS 111	Computer Operations	3
340MFGT 105	Introduction to Advanced Manufacturing I	3
340MFGT 106	Introduction to Advanced Manufacturing II	3
340MFGT 128	Intro to Data Center Operations	3
340MFGT 188	Industrial Electricity I	3
340MFGT 189	Industrial Electricity II - Motors	3
340MFGT 288	Industrial Electricity III - PLC's I	3
Total Hours		27

Pathway

This is an **example course sequence** for students interested in pursuing Data Center Operations Foundations. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Data Center Operations Foundations.

Semester by Semester Pathway for Full-Time Students

All plans can be modified to fit the needs of part-time students by adding more semesters.

Semester 1		Hours
340MFGT 105	Introduction to Advanced Manufacturing I	3
340MFGT 106	Introduction to Advanced Manufacturing II	3
340MFGT 128	Intro to Data Center Operations	3
AIR CON 159	Industrial Cooling and Refrigeration	3
340MFGT 188	Industrial Electricity I	3
Hours		15
Semester 2		
AIR CON 204	Advanced Control Systems	3
CIS 111	Computer Operations	3
340MFGT 189	Industrial Electricity II - Motors	3
340MFGT 288	Industrial Electricity III - PLC's I	3
Hours		12
Total Hours		27

Choose your courses with your College Advisor.

Careers

This program can prepare students for the jobs listed below. Click on each one to learn more, including average earnings, annual job openings, and how much education people in that field have. For additional

guidance and resources on career options, current City Colleges students and alumni can contact the Career Services Office (<https://www.ccc.edu/departments/Pages/Career-Services.aspx>).

Data Warehousing Specialists

Job Description

Design, model, or implement corporate data warehousing activities. Program and configure warehouses of database information and provide support to warehouse users.

Salary Based on Experience Level

Take a look at the average hourly/annual earnings for this career in Cook County

Lightcast earnings figures are based on OES data from the BLS and include base rate, cost of living allowances, guaranteed pay, hazardous-duty pay, incentive pay (including commissions and bonuses), on-call pay, and tips.

Annual Wages

Entry-Level 10 th Percentile	\$104,350
Median 50 th Percentile	\$154,350
Senior-Level 90 th Percentile	\$211,292

Hourly Wages

Entry-Level 10 th Percentile	\$50
Median 50 th Percentile	\$74
Senior-Level 90 th Percentile	\$102

Annual Job Openings

48 annual openings in Cook County

National Education Attainment

Here, you can see the level of education that people in this career complete.

Degree Program	% of Jobs
A high school diploma or less	4.35%
A certificate	4.35%
Some college	4.35%
An Associate degree	4.35%
A Bachelor's degree	78.26%
A Master's or Professional degree	4.35%
A Doctoral degree or more	0.00%

82.61% continue their education beyond an associate degree