

## CHARLIE PAPAZIAN BREWING EDUCATION LAB



THANKS TO CHARLIE'S FRIENDS WHO MADE THIS SPACE POSSIBLE

### GOLD MEDAL

CHRISTIAN HARDHART  
MARTHA NELSON  
STEVE KALLPAIN

### SILVER MEDAL

CHRISTINE MARQUEZ-HADSON  
ANNE VAN WETTINGA  
ELIZABETH STOKERMAN

### BRONZE MEDAL

MICHAEL WITT  
EDWARD TONS

### STAINLESS STEEL MEDAL

JOANNA LEE  
ALFRED WARTON  
KATY AND JONAH CIPOLLA  
PHILIP MACGREGOR  
BOB & BETTY WHITE

HELENE VER BECK  
KATHERINE STRAIN  
ERIC OLSON

JIM JOHNSON  
ASHLEY KENT  
DANIELE BUNDT

RYAN JONES  
KIP HODGW



MSU<sup>SM</sup>  
DENVER  
SCHOOL OF  
HOSPITALITY

CHARLIE PAPAZIAN  
BREWING EDUCATION LAB

# Honoring Charlie's Legacy in the Beer Industry

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Smithsonian Magazine called Charlie Papazian “the schoolteacher who sparked America’s Craft Brew Revolution.” A teacher at heart, Charlie remembers the early days of teaching home brewers sitting on the floor of his living room in Boulder, Colorado. It’s only fitting that – located down the road from his home – Metropolitan State University of Denver plans to honor his contributions to the world of beer while educating the industry leaders of tomorrow by naming its new brewing laboratory **The Charlie Papazian Brewing Education Lab**. Your generous support will help MSU Denver make this vision a reality.



# Blending the Art and Science of Brewing with Critical Business Skills



Housed in the School of Hospitality and supported by the One World One Water Center and the biology and chemistry departments, MSU Denver's **Brewery Operations bachelor's degree program** blends the art, engineering and science of brewing beer with the hands-on skills and operational knowledge necessary to work in the constantly changing alcoholic beverage market.

This program allows graduates to find success in this exciting and challenging field by ensuring they are workforce-ready and prepared to:

- Join a brew deck.
- Run a packaging line.
- Work in quality control and analysis labs.
- Become part of a sales and marketing team.
- Work at a Distributor.
- Rise through the ranks of management and leadership in the beer and beverage industries.
- And more.



# New 3.5 bbl Professional Brewing Lab

The [Beverage Analytics QA/QC Lab](#) currently serves as:

- A teaching space where students learn to brew on a 10-gallon Ruby Street brewing system.
- A fee-for-service laboratory run in partnership with the Siebel Institute.
  - Run by a TTB-certified chemist.
  - Provides information for brewers who lack access to sophisticated equipment like gas chromatographs and alcolyzers, or the capability to perform advanced techniques such as cellular enumeration, culturing, PCR or bioinformatics.

The new brewing lab will improve students' real-world experience with:

- A 3.5 bbl pilot system built by [Forgeworks](#), producer of hand-built, customized brewing systems.
- A three-vessel system set on a platform, including a gas-fired Kettle/Whirlpool, Mash/Lauter Tun and Hot Liquor Tank.

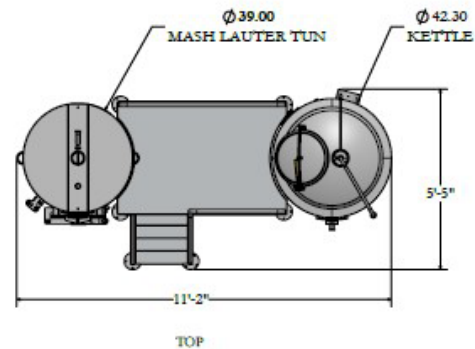


# 3.5 bbl Brewing System



## 3.5 BBL BREWHOUSE STANDARD FOOTPRINT

ALL DIMENSIONS, PORTS AND  
FEATURES ARE CUSTOMIZABLE



HOT LIQUOR TANK OPTIONS			
		A - HEIGHT	B - DIAMETER
7 BBL PLT - FLAT LID		5' - 1.5"	3' - 6"
7 BBL PLT - CONE TOP		6' - 1.5"	3' - 6"

CUSTOMER REVIEW		DATE	TIME
BY:	REVISION:	DATE:	TIME:
APPROVAL SIGNATURE		DATE:	
CUSTOMER NAME / COMPANY		DATE:	

3.5 BBL BREWHOUSE AND HOT LIQUOR TANK  
2.5 BARREL BREWHOUSE AND HOT LIQUOR TANK, FLOOR LAYOUT  
304 STAINLESS  
1 x 1





# New Bar Tasting Area



# Comprehensive Curriculum



Students take a variety of classes, creating a broad range of experiences to prepare them for the workforce. Required classes include:

- Financial Leadership for Hospitality
- Brewery Mechanics
- Beers of the World
- Brewery Operations
- Alcohol Beverage Law Sensory
- Quality Analysis of Beer
- Applied Brewing Operations (Senior Experience)
- Beer Styles & Service
- Brewing Science
- Brewing Quality Analysis
- Cost Control for Hospitality & Tourism
- General Microbiology
- Principles of Chemistry
- Chemistry Laboratory
- Introduction to Organic & Biological Chemistry
- Introduction to Organic & Biological Chemistry Laboratory

# Comprehensive Curriculum



## Elective Classes Include:

- Beer & Food
- Bar & Beverage Operations
- Beer & Spirits
- Beverage Promotion
- Study Abroad in Hospitality
- Talent Leadership
- Facilities Operations
- Organizational Leadership for Hospitality
- Internship in Hospitality
- Strategic Management for Hospitality





# Impact of the New Papazian Brewing Lab

The new brewing lab will benefit students, the University and the brewing industry by:

- Moving the existing 15-gallon Ruby Street brewing system and adding a 3.5 bbl brewhouse and fermentation vessels for improved real-world experience.
- Expanding bar seating at [Degree](#) - located in the attached, University-owned SpringHill Suites. Hotel guests, visiting brewers, students 21+, the community and beer enthusiasts will:
  - Have access to an informal tasting panel of student-brewed beer.
  - Provide sensory feedback on the taste and quality of the product based on a formal sensory program developed by students in the Sensory Quality Analysis for Beer course.



# Work-Ready Graduates

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MSU Denver's Brewery Operations graduates are cross-trained in all aspects of the business and ready to go to work. They know how to read a P&L, move hoses, optimize a supply chain, use a microscope, trouble shoot operational problems, create marketing ideas and sell a brand to distributors, retailers and consumers.



“Charlie’s Lab” is being constructed in MSU Denver’s Hospitality Learning Center, attached to the University-owned SpringHill Suites Hotel. The hotel is a training center for hospitality students, a profit center for the University and an amenity for the campus. The lab will be located underneath the glass enclosure on the left side of this photo.

# Graduates' Employment

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- Anheuser-Busch InBev
- Berthoud Brewing Co.
- Best Little Wine Company
- Blue Moon Brewing Company
- Blue Spruce Brewing Company
- Boulevard Brewing Company
- Call to Arms Brewing Company
- Crooked Stave Artisan Beer Project
- Devils Backbone Brewing Company
- Dog House Brewery
- Great Divide Brewing Company
- Green Dragon
- Highlands Wine and Liquor
- Holidaily Brewing Company
- Juvare
- MSU Denver
- Mission Yogurt, Inc.
- Molson Coors Beverage Company
- Oskar Blues Brewery
- Rm3 Labs
- Sectra Food Service & Hospitality
- Sierra Nevada Corporation
- Springboard
- Stranahan's Colorado Whiskey
- Symphony MediaAI
- Tivoli Brewing Company
- Triple Canopy

\*Source: Linked In Live Alumni

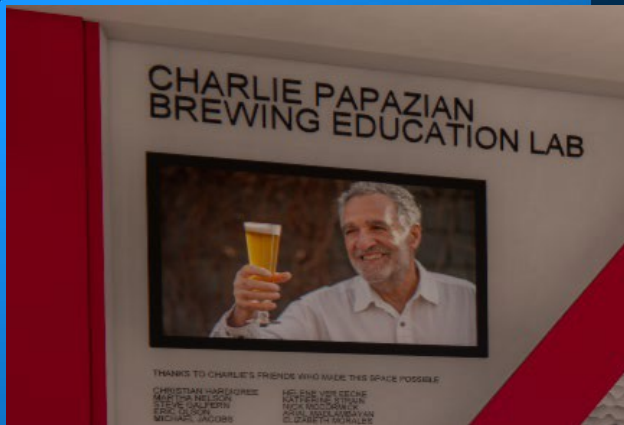
# Invest in “Charlie’s Lab” and Make a Difference

With partners like you, we are building a bright future for our students and advancing the beer industry. Honor the legacy of a changemaker in the industry and support the next generation of brewers by making a gift to the Charlie Papazian Brewing Education Lab.

## Giving levels include:

- **\$100,000+      Gold Medal**
- **\$50,000        Silver Medal**
- **\$25,000        Bronze Medal**
- **\$10,000        Stainless Medal**

We are dedicated to working with you to recognize your generosity in a way that is meaningful to you. Donors of \$10,000 or more will be recognized with their names listed under Charlie’s picture behind the bar.





# Ways to Give

Donations to name The Charlie Papazian Brewing Education Lab are tax- deductible through the MSU Denver Foundation, which is recognized as a 501(c)(3) tax-exempt organization under the Internal Revenue Code. Gifts can be paid over a five-year period. Funds will be used to build the new lab, for future maintenance and repair (to keep it a condition that its namesake deserves) and to support the Brewery Operations program.

Gifts can be in the form of cash, stock, securities or IRA charitable roll-overs.

Please send all checks to:

MSU Denver Foundation  
Campus Box 14, PO Box 173362  
Denver, CO 80217-3362

To give online, please go to

<https://www.msudenver.edu/giving/cc-htm05/>.

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JIM JOHNS ON  
ASHLEY KENT  
DANIELE BUNDT

RYAN JONES  
KIP HODGW

# THANK YOU FOR YOUR CONSIDERATION!

For more information,  
please contact:

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