

UC San Diego

TRITON^{DAY}

CHEMICAL ENGINEERING

Department of NanoEngineering, UC San Diego

Dr. Aaron Drews

UC San Diego

EnVision

Arts and Engineering Maker Studio





IT'S A CREATIVE SPACE.

ENGINEERING AND VISUAL ARTS
STUDENTS COME TOGETHER TO

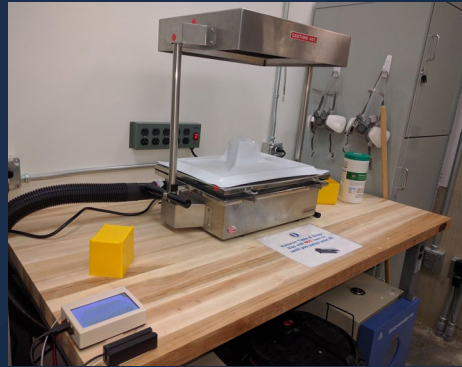
THINK/DESIGN/MAKE/
TINKER/BREAK
/BUILD AGAIN.

ENVISION.UCSD.EDU

UC San Diego
Arts and Humanities

UC San Diego
Jacobs School of Engineering

envision.ucsd.edu



Non-class work is welcome! (subject to approval)

You pay for consumables; we provide equipment and space!

See webpage for access hours, workshops, tutorials, and more

Each program has an “Experience Engineering” course in the Maker Studio.

Robots

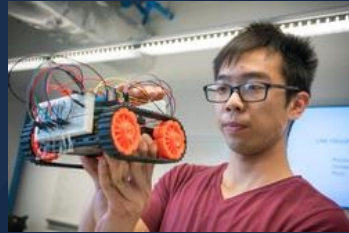
Not Robots

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Robots

Not Robots

Elec. Eng.



Comp. Sci.
& Eng.



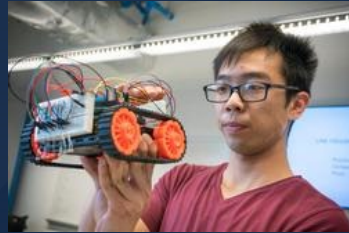
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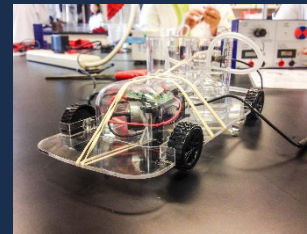


Not Robots

Nano Eng.



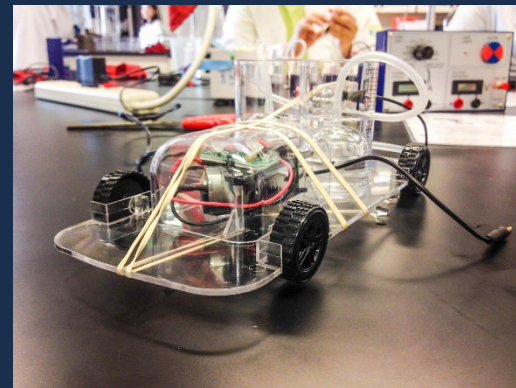
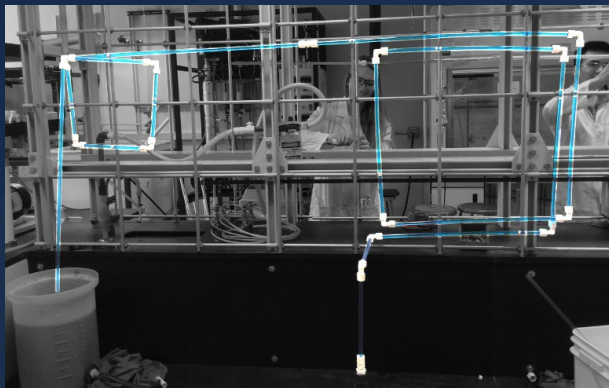
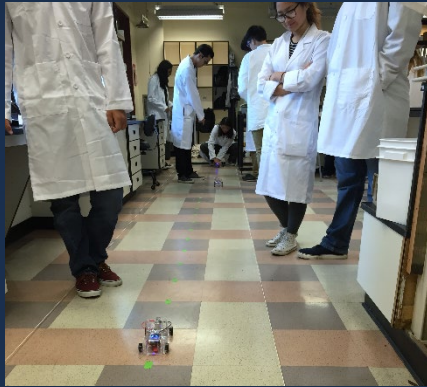
Chem. Eng.



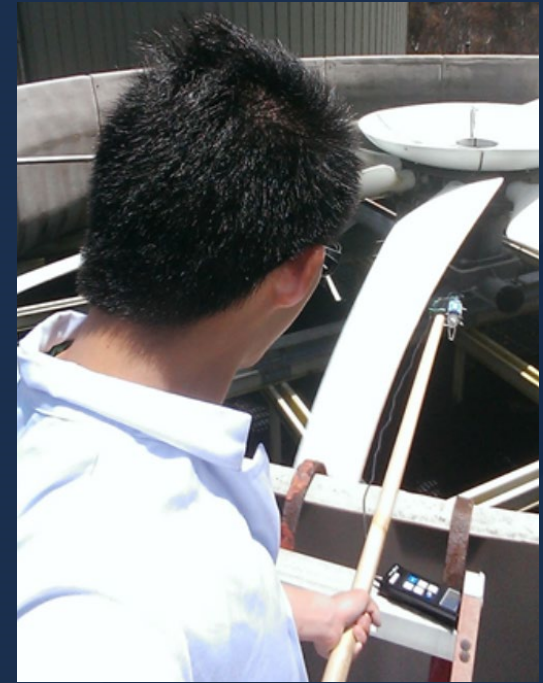
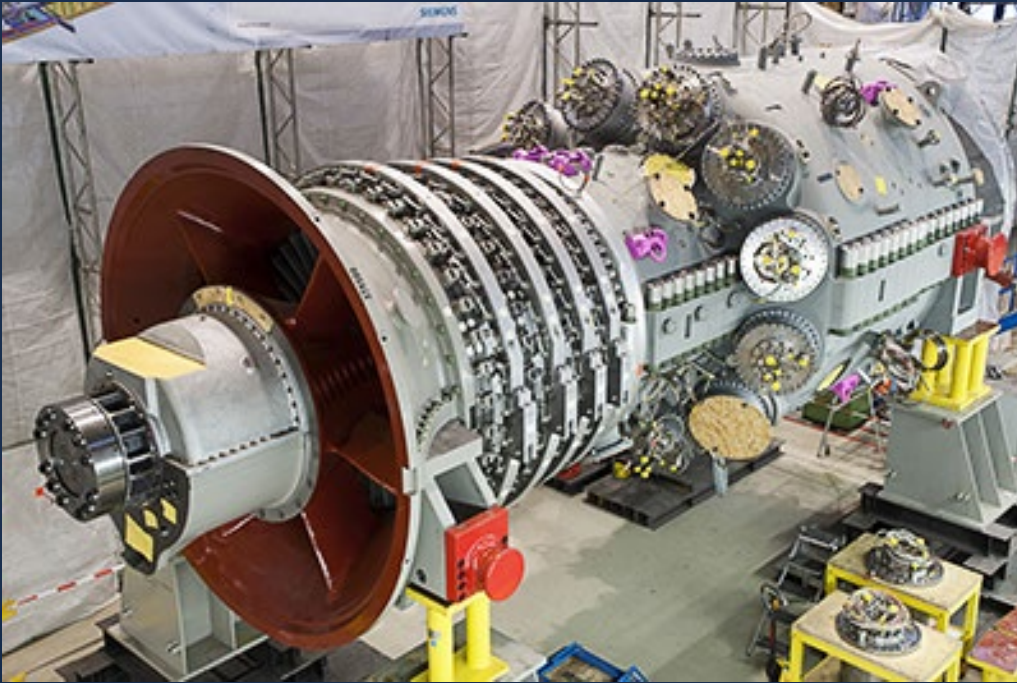
Bio. Eng.



Experience Chemical Engineering during your freshman year!



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Chemical engineers (that could be you!) **transform**

low value stuff

into

high value stuff.

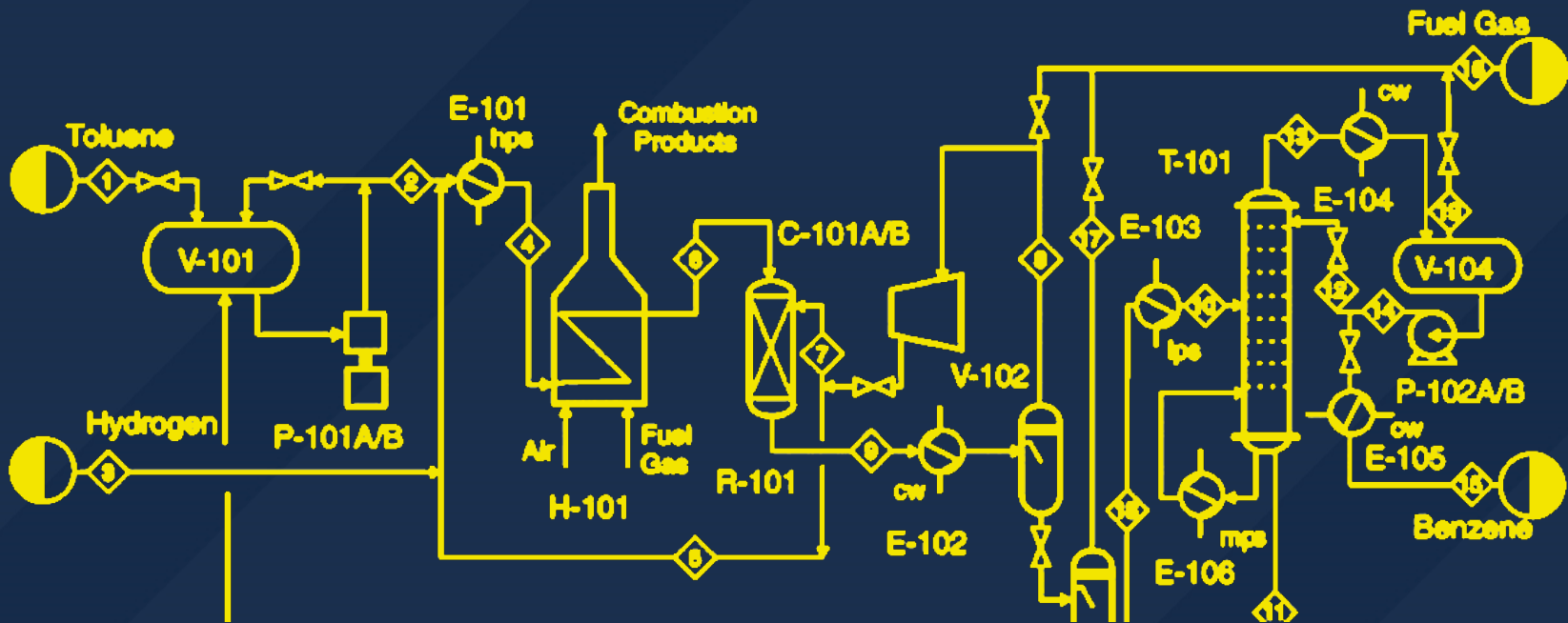
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Chemistry



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Chemical Engineering



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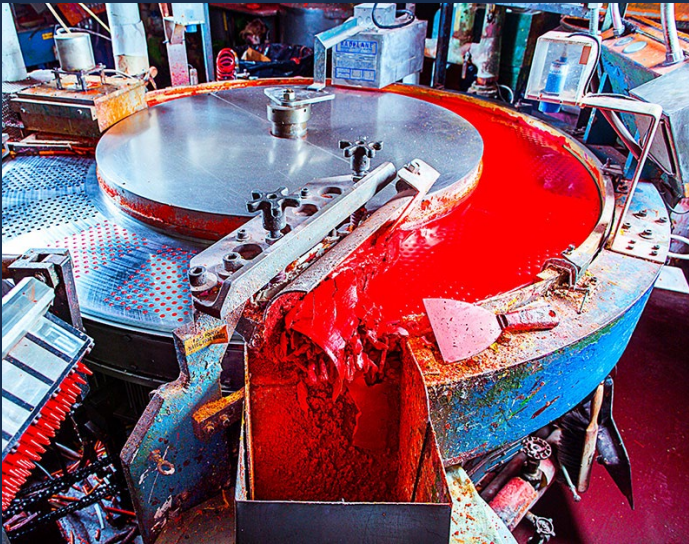


Distillation – Separating things that don't want to separate.

[theamericanenergynews.com]

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Mixers – Making things stick when they don't want to.

[wired.com]

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Reactors – Synthesizing the good stuff on a grand scale.

[eastsidebrewers.org]

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Heat exchangers – Making the hot cold and the cold hot.

[hotflusher.com/industrial.cfm]

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Clean energy – Transitioning from fossil fuels to renewables.

[carmagazine.co.uk]

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Water purification – Addressing local, regional, and global shortages.

[news.discovery.com]

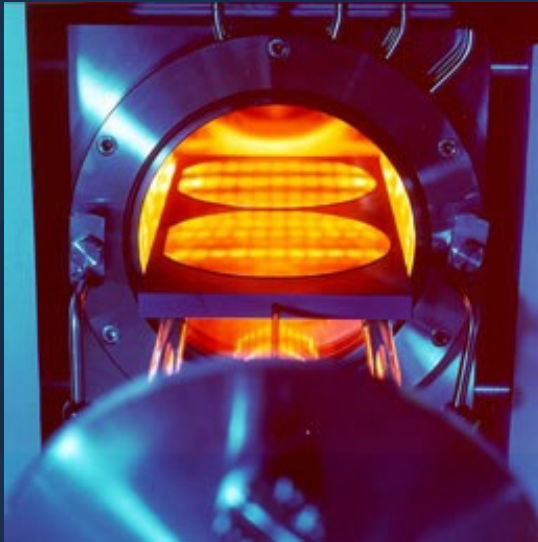
Modern chemical engineering is highly interdisciplinary.



Bioengineering – Producing high-value, low-yield products

[wikipedia.org/biochemical_engineering]

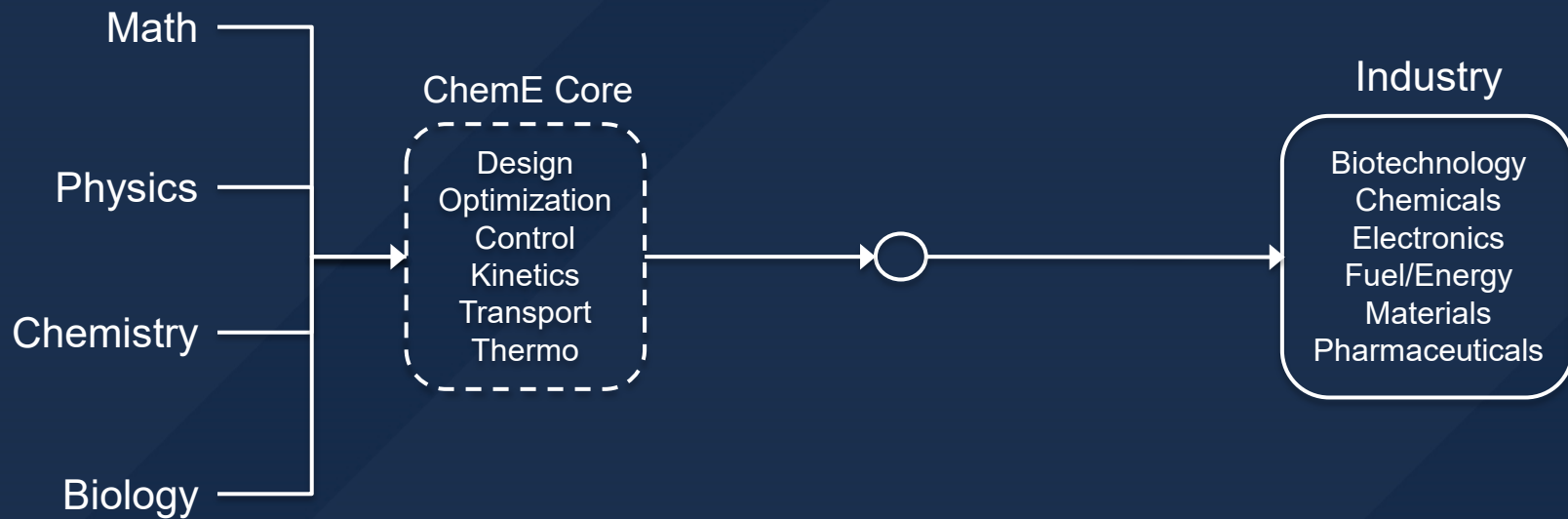
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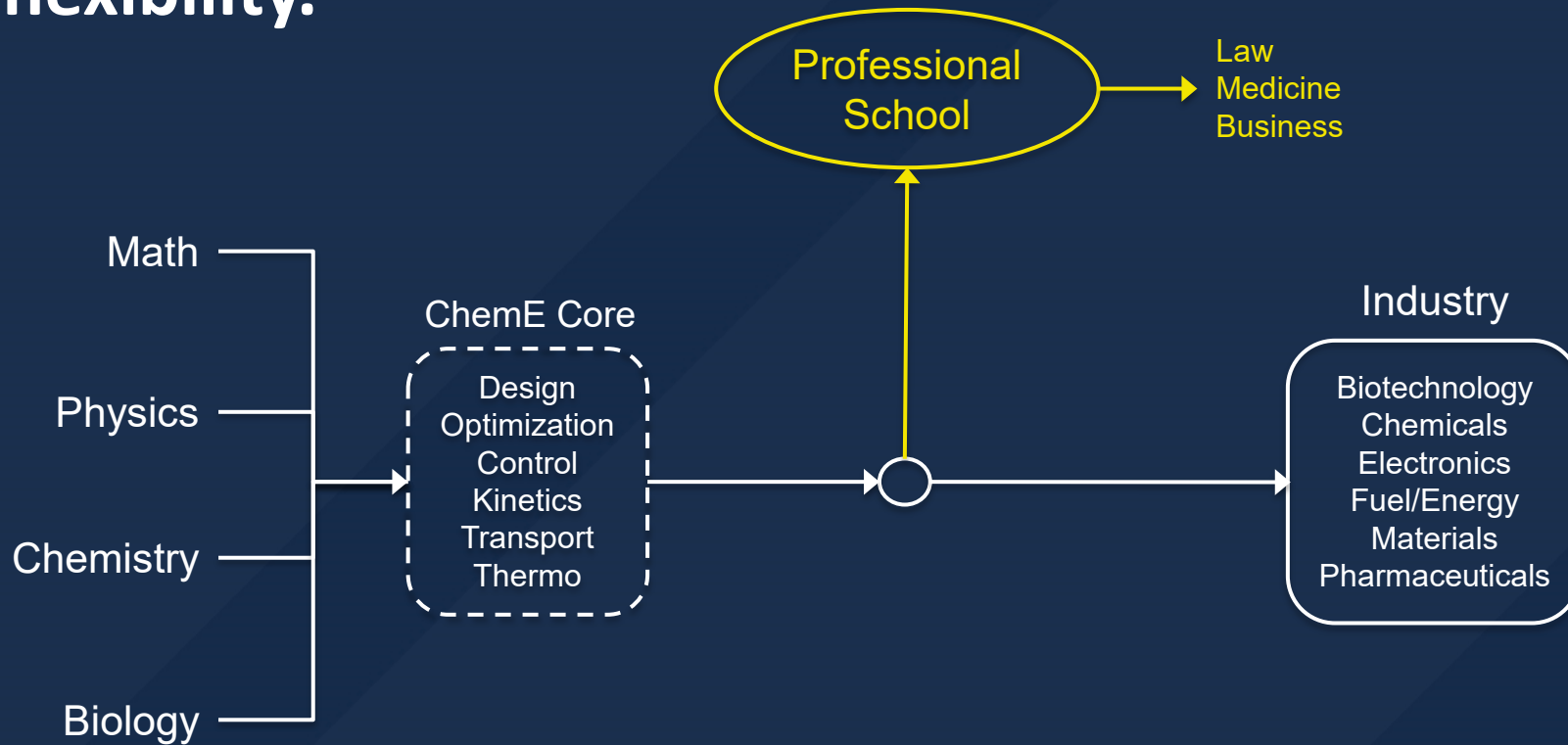
NanoEngineering – There's plenty of room at the bottom! *

[wikipedia.org/biochemical_engineering]

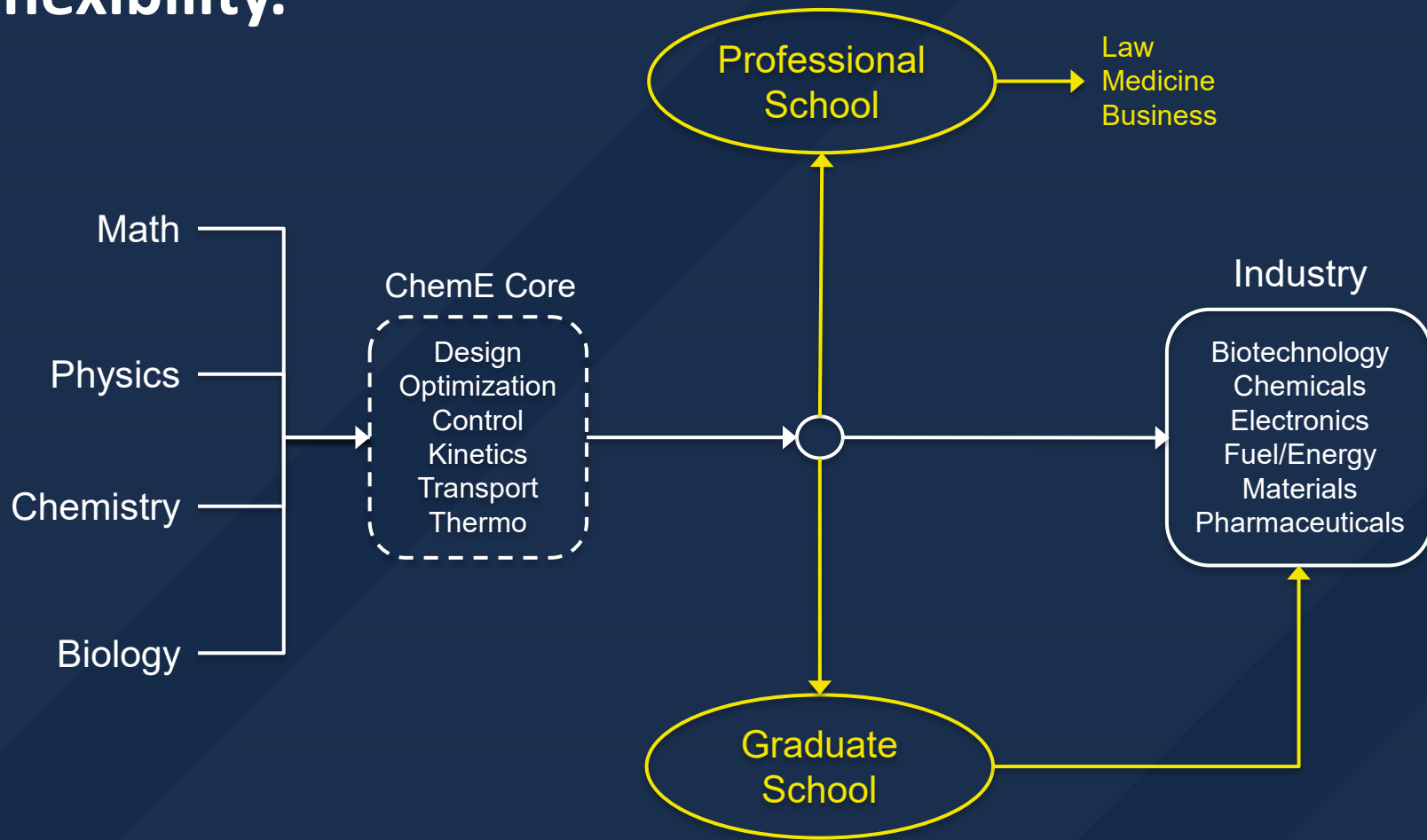
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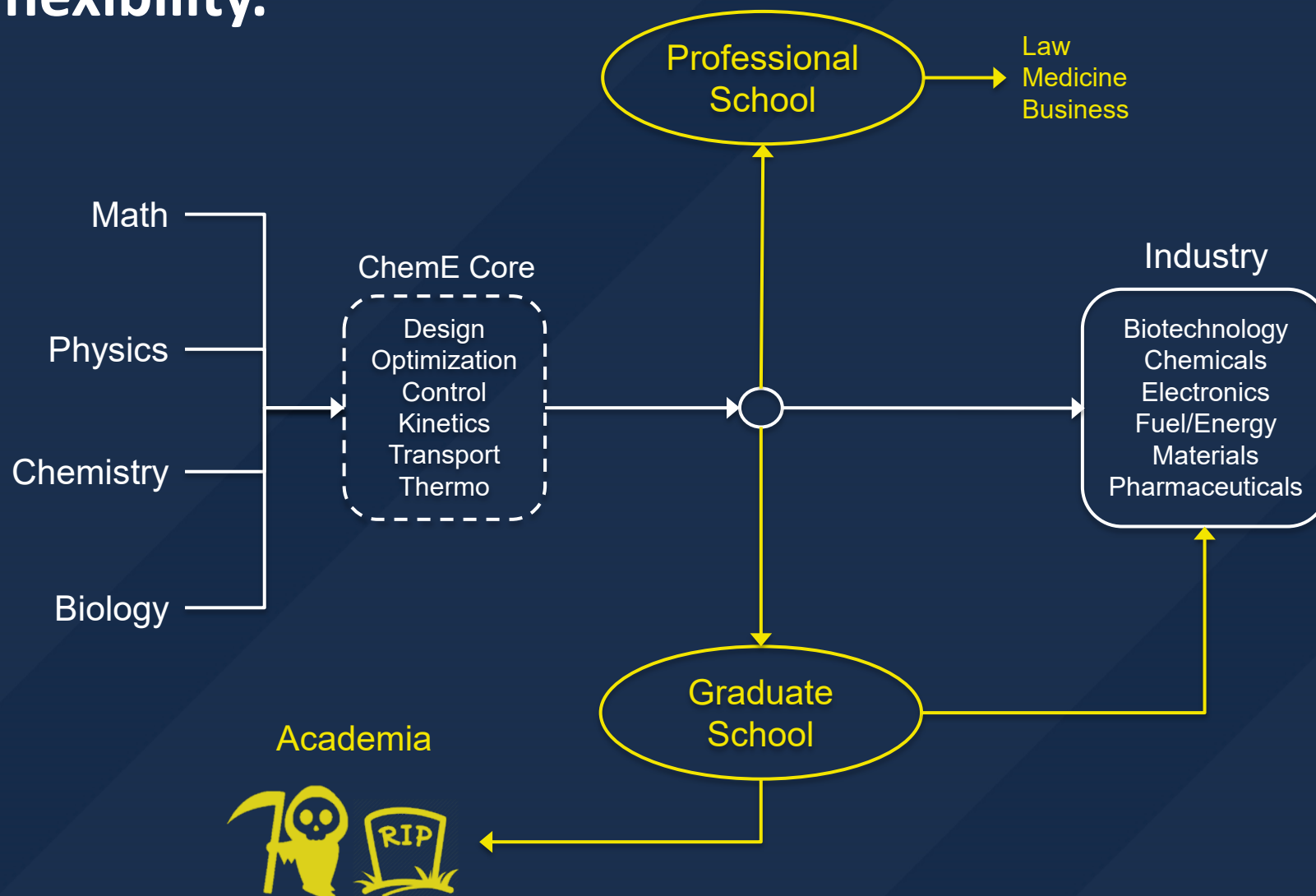
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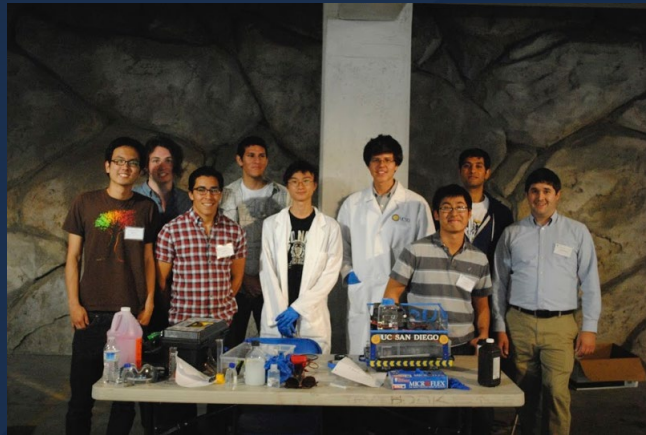


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There are many organizations that you can join as an undergraduate.

American Institute of Chemical Engineers (AIChE)



NanoEngineering and Technology Society (NETS)



ChemE Car team
Engineers without Borders
Engineers for a Sustainable World
Tau Beta Pi (Eng. Hon. Soc.)
Global TIES,

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6. **How many and when do CENG students get jobs after they graduate?**
I don't have that information :(