UC San Diego

CHEMICAL ENGINEERING

WELCOME!

UC San Diego
Aiiso Yufeng Li Family Dept. of
Chemical and Nano Engineering

Dr. Aaron Drews
Associate Teaching Professor
PhD Chemical Engineering

Chemical engineers transform low value stuff into high value stuff.

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Fall 2024

Chemical engineers transform low value stuff into high value stuff.

Chemistry

A + B □ C + D

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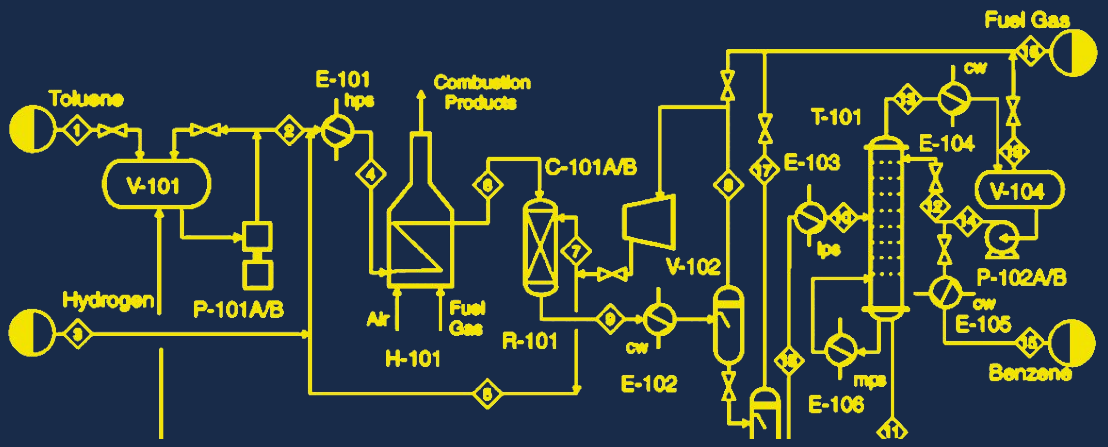
Chemical engineers transform low value stuff into high value stuff.

Chemistry

A + B → C + D

Chemical Engineering



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Here you'll learn a mixture of traditional and modern chemical engineering.

Traditional

Modern

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Mixing

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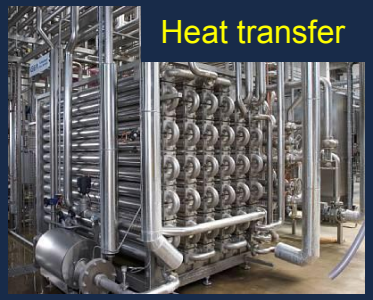

Heat transfer

Modern

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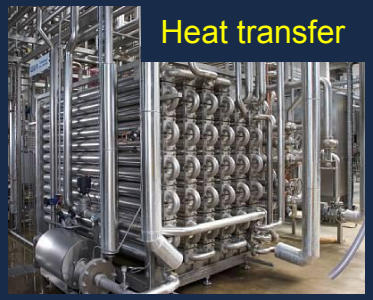

Heat transfer

Reactor design

Modern

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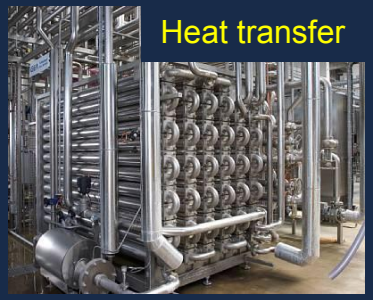

Heat transfer

Reactor design

Modern

Clean energy

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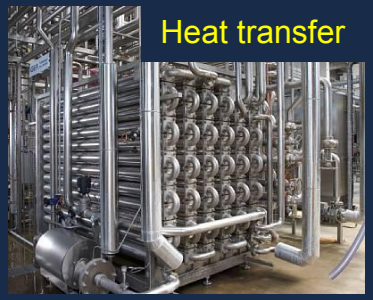
Heat transfer

Reactor design

Modern

Clean energy


Water purification

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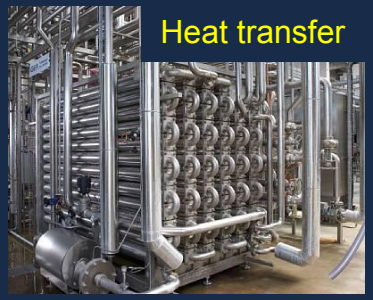
Heat transfer

Reactor design

Modern

Clean energy


Water purification


Bio/Pharma

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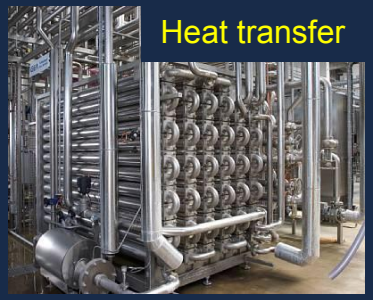

Heat transfer

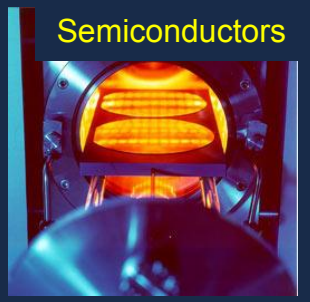
Reactor design

Modern

Clean energy


Water purification


Bio/Pharma


Semiconductors

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Our courses transition from fundamentals to applications.

Level	Course	Desc.	Fundamental or Application?

(*) = Lab or hands-on course

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Level	Course	Desc.	Fundamental or Application?
Soph.	100	Material, energy balances	Fundamental
	102	Thermodynamics	Fundamental
	113	Reaction engineering	Application

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Level	Course	Desc.	Fundamental or Application?
Soph.	100	Material, energy balances	Fundamental
	102	Thermodynamics	Fundamental
	113	Reaction engineering	Application
Junior	101A	Fluid mechanics	Fundamental
	101B	Heat transfer	Fundamental
	101C	Mass transfer	Fundamental
	170	Experimental Methods (*)	Application

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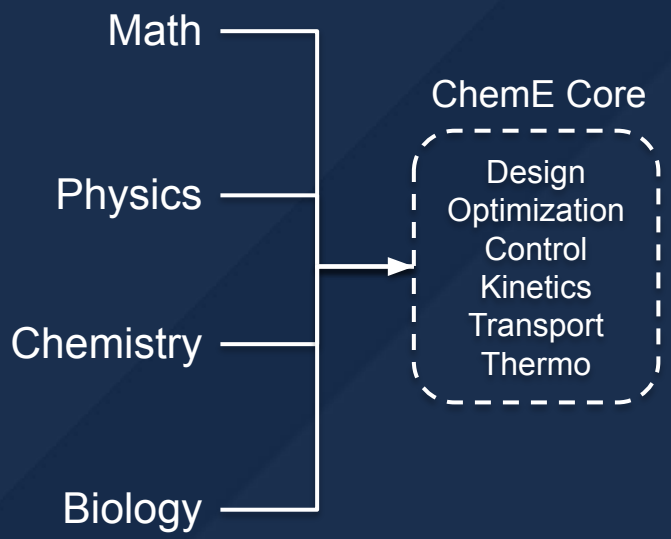
Junior	101A	Fluid mechanics	Fundamental
	101B	Heat transfer	Fundamental
	101C	Mass transfer	Fundamental
	170	Experimental Methods (*)	Application
Senior	120	Process control	Application
	122	Separations	Application
	124 A/B	Process design	Application
	176 A/B	Process engineering lab (*)	Application

A degree in chemical engineering gives you career flexibility.



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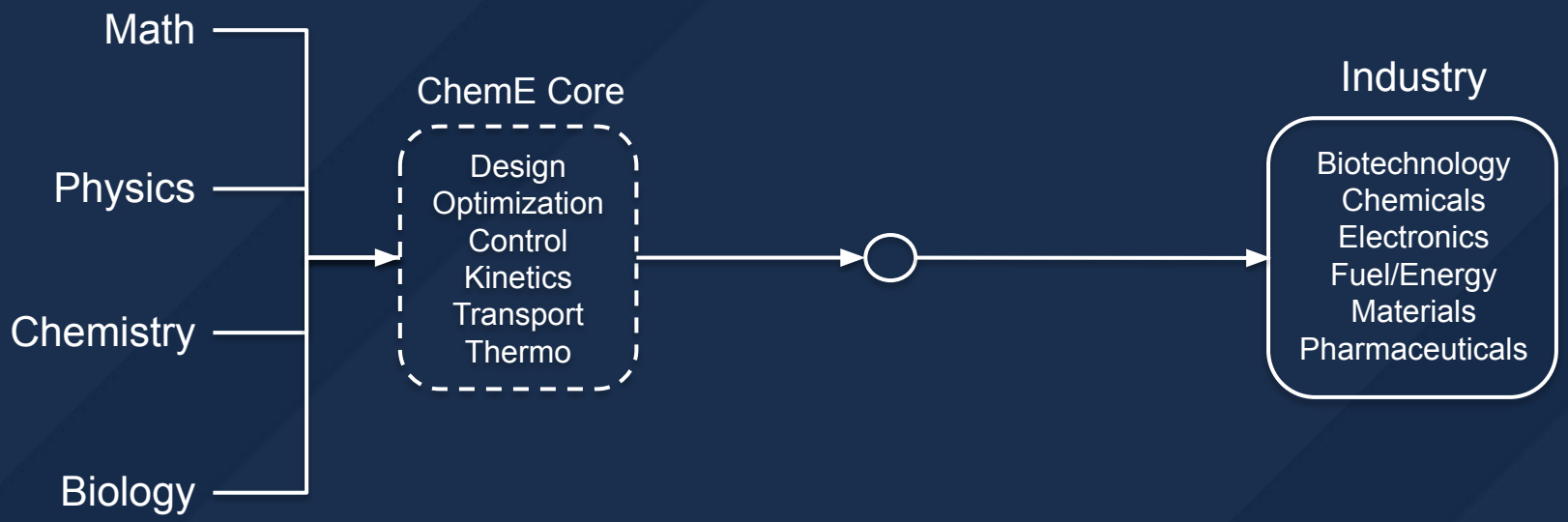

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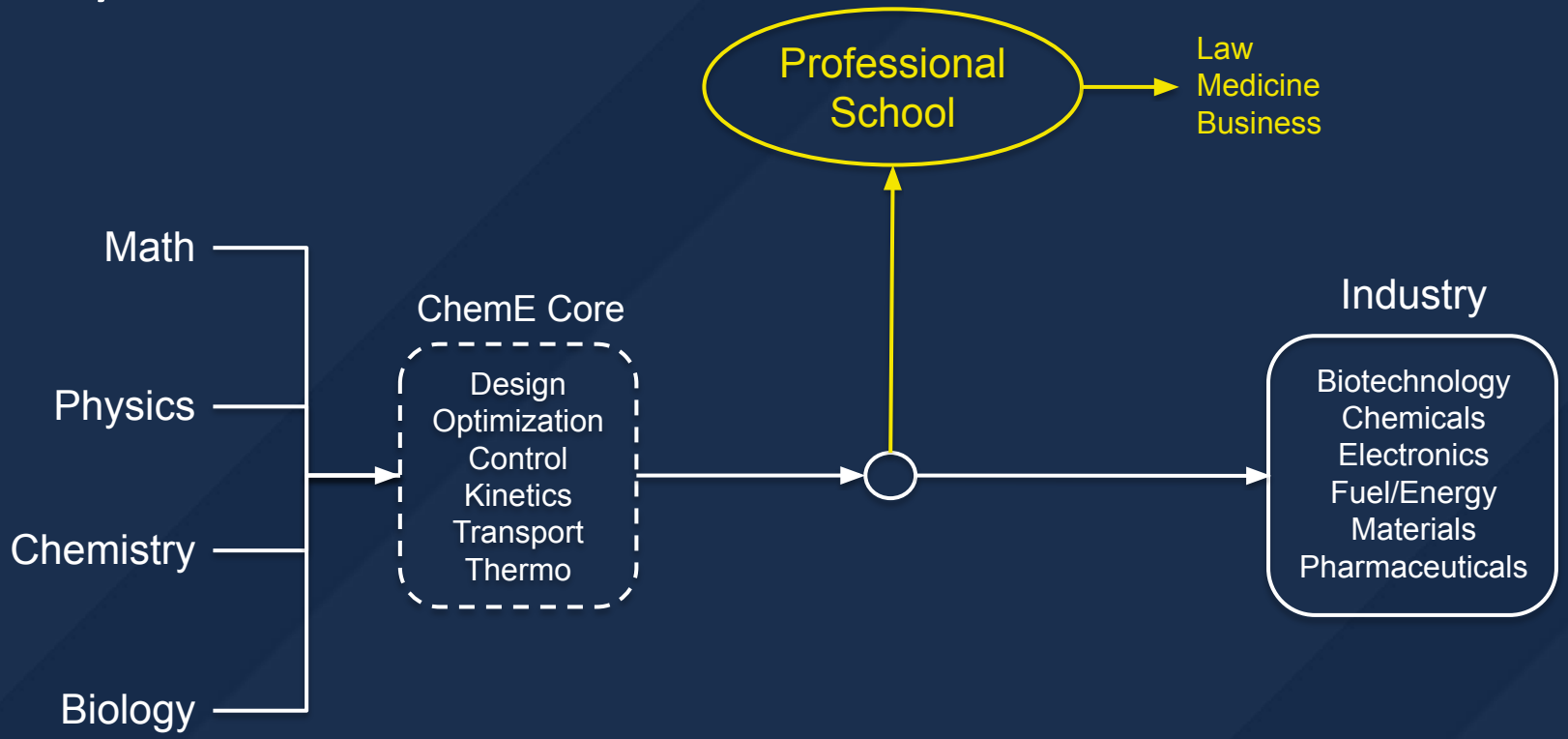

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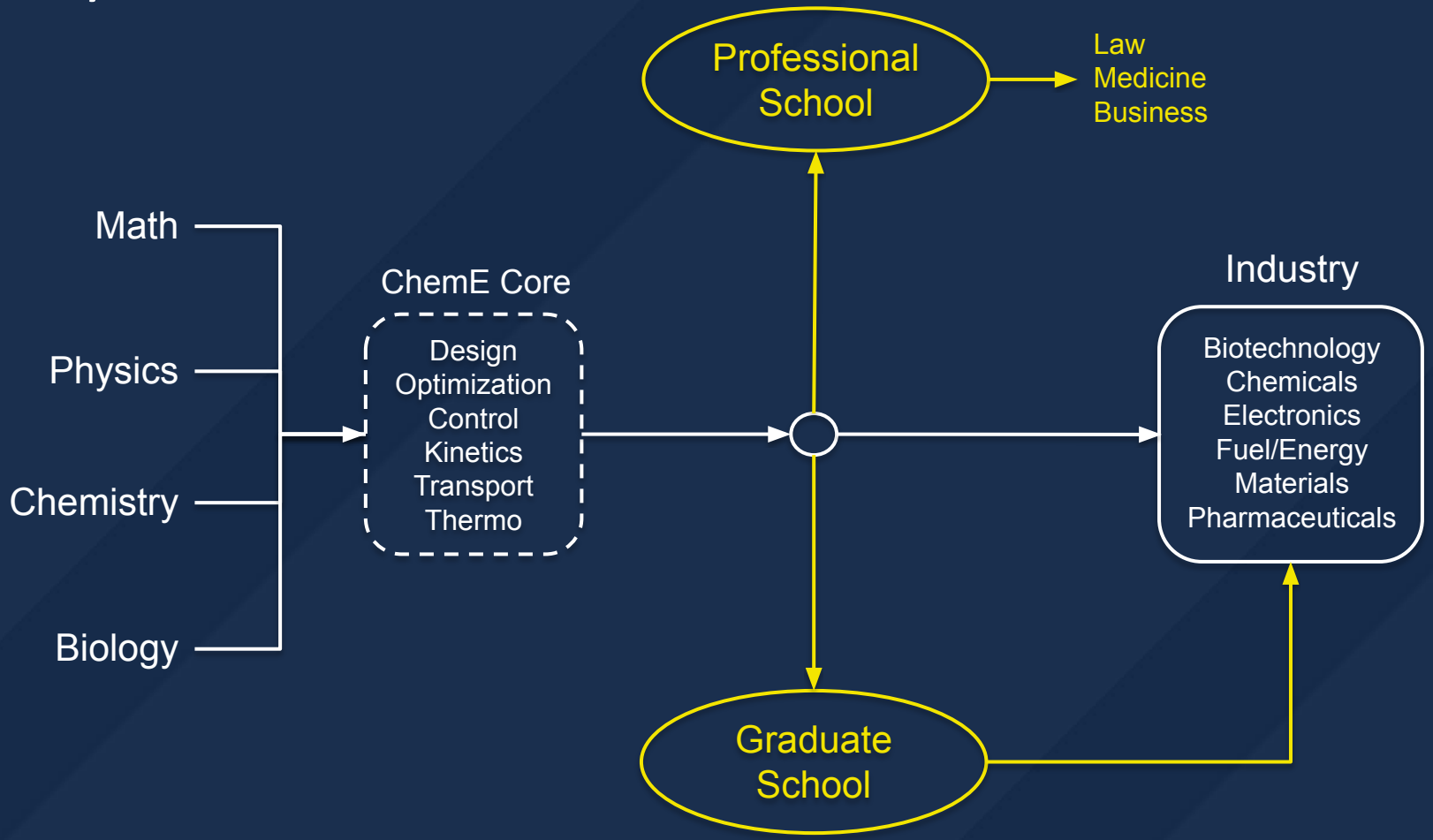

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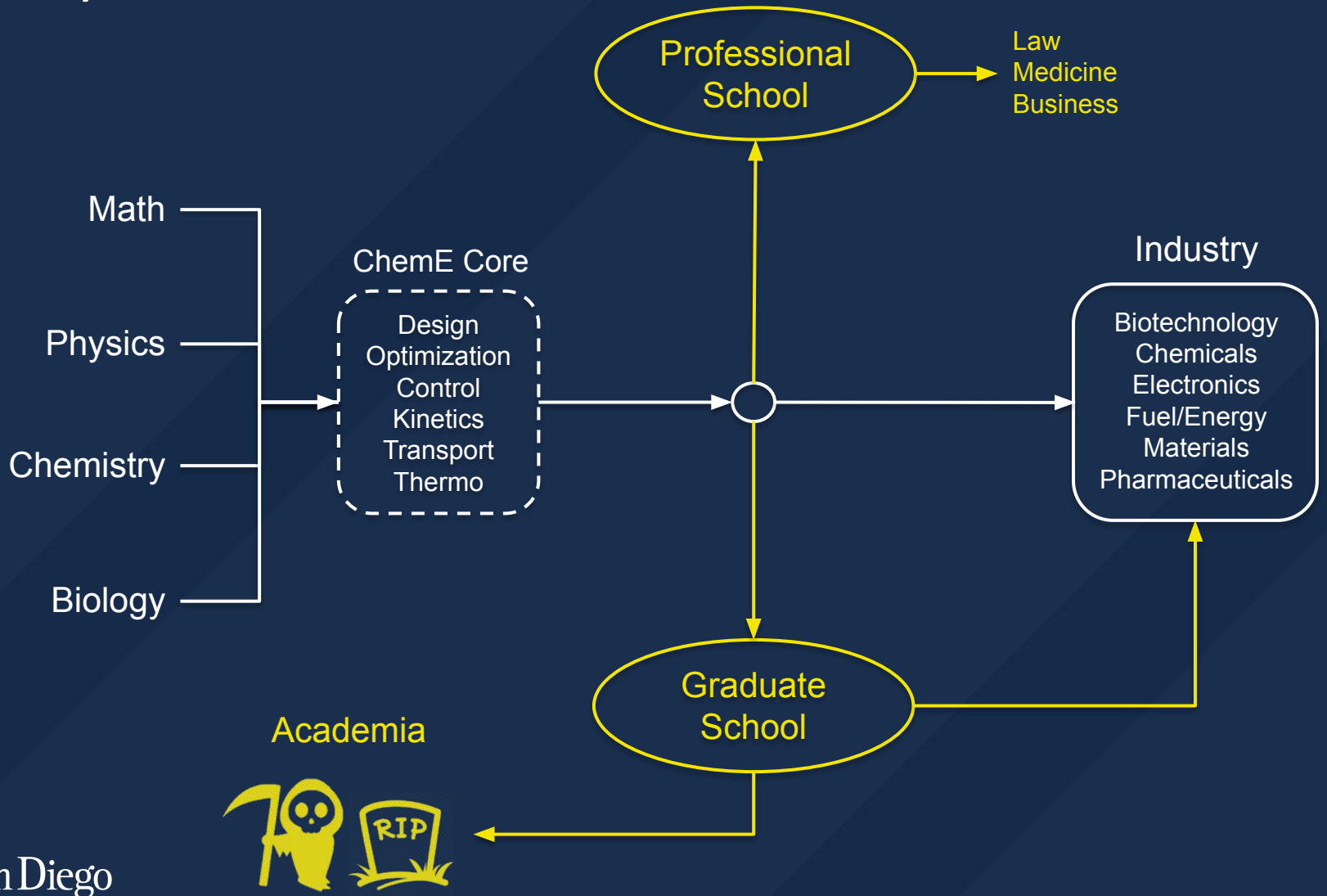

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