



My GCP AI Business Laboratory

Learn. Build. Automate. Invest. Stay Curious.



4 vCPU



16 GB RAM



80 GB Disk



Linux

1 GCP MONTHLY COST ESTIMATE

e2-standard-4 • 4 vCPU • 16 GB • 80 GB PD Standard • us-central1
730 hours/month • Linux • No unusual network egress

	NO COMMITMENT (On-Demand)	1-YEAR CUD	3-YEAR CUD
e2-standard-4 Compute	\$97.84	\$61.64	\$44.03
80 GB PD Standard (\$0.04/GiB-mo)	\$3.20	\$3.20	\$3.20
Estimated Monthly Total	\$101.04	\$64.84	\$47.23
Annualized	\$1,212	\$778	\$567
Savings vs. On-Demand	—	~\$434/yr	~\$643/yr
Effective Compute Discount	—	~37%	~55%

If using PD Balanced instead of Standard, add ~\$4.80/month (80 GiB x \$0.10/GiB-mo).

2 WHY ~\$100/MONTH IS SENSIBLE



\$100/month
~\$3.30/day



Less than many
common hobbies



Technology
education
& engagement



Build real-world
AI business
workflows



Better technology
investor (FTEC
all-in)

THIS ISN'T JUST A VM, IT'S A LABORATORY



VM



Cloud
Services



AI



Real-World
Insights

GOLDEN AGE OF AI OPPORTUNITY



AI compresses expensive human workflows



From data entry to decision intelligence



Humans become exception managers



Productivity, accuracy, speed, scale

DON'T BUY 3-YEAR CUD YET



Requirements
will change



Commitments
continue billing



Less flexibility,
more lock-in



Stay flexible,
learn faster

3 MODERN AI-ENABLED BUSINESS ARCHITECTURE (EXAMPLE)



4 WHERE AI CREATES REAL VALUE



Medical
Practice

- Triage & routing
- EMR automation
- Document AI
- Clinical workflows
- Audit & compliance



Accounting
Firm

- Invoice capture
- Classification
- Approval flows
- GL integration
- Reconciliation



Construction
Business

- Plans & RFIs
- Change orders
- Photo analysis
- Task automation
- Project tracking



Insurance
Claims

- Claim intake
- Document AI
- Policy matching
- Complexity scoring
- Exception routing



E-Commerce
Business

- Orders & inventory
- Customer support
- Recommendations
- Forecasting
- Automation

AI isn't the product. The workflow is the product.

5 MY AI BUSINESS LAB RULES



\$100/month
Technology R&D Budget
Not just a GCP expense.



Every Service Must Teach
Build with purpose. Learn
real business capability.



Build Real Workflows
One complete business
workflow every 1-2 months.

6 MY LEARNING & BUILDING ROADMAP

Phase 1

Foundation



- Linux, Docker
- Networking
- PostgreSQL
- Basics done right



Phase 2

Cloud-Native



- Cloud Run
- Storage
- Pub/Sub
- IAM, Secrets



Phase 3

Data



- BigQuery
- SQL
- Pipelines
- Analytics



Phase 4

AI



- Gemini
- Vertex AI
- Embeddings
- RAG



Phase 5

Agents



- Tool calling
- APIs
- Workflows
- Human-in-the-loop



Phase 6

Business



- Vertical AI apps
- End-to-end systems
- Real customers
- Deliver value



Phase 7

Economics



- Cost per customer
- Unit economics
- ROI
- Sustainable value

7 PERSPECTIVE: COST OF CURIOSITY



\$3.30
per day



My AI
Laboratory



Continuous
Learning



Better Investor
Better Operator

8 MY CURRENT LAB STACK (EXAMPLE)



Docker



Linux



PostgreSQL



pgAdmin



MariaDB



Docmost



OpenEMR



WordPress



Nginx Proxy
Manager



Portainer

The goal: Build. Learn. Automate. Create real-world value. Stay curious.

[hub.gravelcloud.com] Rigel G Arcayan, 2026